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Key to numeration

1 lakh	=	One hundred thousand
10 lakh	=	One million
1 crore	=	Ten million
100 crore	=	One billion

1 Land and the People

INDIA is one of the oldest civilisations in the world with a kaleidoscopic variety and rich cultural heritage. It has achieved all-round socio-economic progress during the last 60 years of its Independence. India has become self-sufficient in agricultural production and is now the tenth industrialised country in the world and the sixth nation to have gone into outer space to conquer nature for the benefit of the people. It covers an area of 32,87,263[1] sq km, extending from the snow-covered Himalayan heights to the tropical rain forests of the south. As the 7th largest country in the world, India stands apart from the rest of Asia, marked off as it is by mountains and the sea, which give the country a distinct geographical entity. Bounded by the Great Himalayas in the north, it stretches southwards and at the Tropic of Cancer, tapers off into the Indian Ocean between the Bay of Bengal on the east and the Arabian Sea on the west.

Lying entirely in the northern hemisphere, the mainland extends between latitudes 8°4' and 37°6' north, longitudes 68°7' and 97°25' east and measures about 3,214 km from north to south between the extreme latitudes and about 2,933 km from east to west between the extreme longitudes. It has a land frontier of about 15,200 km. The total length of the coastline of the mainland, Lakshadweep Islands and Andaman & Nicobar Islands is 7,516.6 km.

PHYSICAL BACKGROUND

Countries having a common border with India are Afghanistan and Pakistan to the north-west, China, Bhutan and Nepal to the north, Myanmar to the east and Bangladesh to the east of West Bengal. Sri Lanka is separated from India by a narrow channel of sea formed by the Palk Strait and the Gulf of Mannar.

PHYSICAL FEATURES

The mainland comprises four regions, namely, the great mountain zone, plains of the Ganga and the Indus, the desert region and the southern peninsula.

The Himalayas comprise three almost parallel ranges interspersed with large plateaus and valleys, some of which, like the Kashmir and Kullu valleys, are fertile, extensive and of great scenic beauty. Some of the highest peaks in the world are found in these ranges. The high altitudes admit travel only to a few passes, notably the Jelep La and Nathu La on the main Indo-Tibet trade route through the Chumbi Valley, north-east of Darjeeling and Shipki La in the Satluj valley, north-east of Kalpa (Kinnaur). The mountain wall extends over a distance of about 2,400 km with a varying depth of 240 to 320 km. In the east, between India and Myanmar and India and Bangladesh, hill ranges are much lower. Garo, Khasi, Jaintia and Naga Hills, running almost east-west, join the chain to Mizo and Rkhine Hills running north-south.

The plains of the Ganga and the Indus, about 2,400 km long and 240 to 320 km broad, are formed by basins of three distinct river systems - the Indus, the Ganga and the Brahmaputra. They are one of the world's greatest stretches of flat alluvium and also one of the most densely populated areas on the earth. Between the Yamuna at

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[1] Provisional as on 31 March 1982

Delhi and the Bay of Bengal, nearly 1,600 km away, there is a drop of only 200 metres in elevation.

The desert region can be divided into two parts - the great desert and the little desert. The great desert extends from the edge of the Rann of Kuchch beyond the Luni river northward. The whole of the Rajasthan-Sind frontier runs through this. The little desert extends from the Luni between Jaisalmer and Jodhpur up to the northern wastes. Between the great and the little deserts lies a zone of absolutely sterile country, consisting of rocky land cut up by limestone ridges.

The Peninsular Plateau is marked off from the plains of the Ganga and the Indus by a mass of mountain and hill ranges varying from 460 to 1,220 metres in height. Prominent among these are the Aravalli, Vindhya, Satpura, Maikala and Ajanta. The Peninsula is flanked on the one side by the Eastern Ghats where average elevation is about 610 metres and on the other by the Western Ghats where it is generally from 915 to 1,220 metres, rising in places to over 2,440 metres. Between the Western Ghats and the Arabian Sea lies a narrow coastal strip, while between Eastern Ghats and the Bay of Bengal there is a broader coastal area. The southern point of plateau is formed by the Nilgiri Hills where the Eastern and the Western Ghats meet. The Cardamom Hills lying beyond may be regarded as a continuation of the Western Ghats.

GEOLOGICAL STRUCTURE

The geological regions broadly follow the physical features and may be grouped into three regions: the Himalayas and their associated group of mountains, the Indo-Ganga Plain and the Peninsular Shield.

The Himalayan mountain belt to the north and the Naga-Lushai mountain in the east, are the regions of mountain-building movement. Most of this area, now presenting some of the most magnificent mountain scenery in the world, was under marine conditions about 60 crore years ago. In a series of mountain-building movements commencing about seven crore years ago, the sediments and the basement rocks rose to great heights. The weathering and erosive agencies worked on these to produce the relief seen today. The Indo-Ganga plains are a great alluvial tract that separate the Himalayas in the north from the Peninsula in the south.

The Peninsula is a region of relative stability and occasional seismic disturbances. Highly metamorphosed rocks of the earliest periods, dating back as far as 380 crore years, occur in the area; the rest being covered by the coastal-bearing Gondwana formations, lava flows belonging to the Deccan Trap formation and younger sediments.

RIVER SYSTEMS

The river systems of India can be classified into four groups viz., (i) Himalayan rivers, (ii) Deccan rivers, (iii) Coastal rivers, and (iv) Rivers of the inland drainage basin. The Himalayan rivers are formed by melting snow and glaciers and therefore, continuously flow throughout the year. During the monsoon months, Himalayas receive very heavy rainfall and rivers swell, causing frequent floods. The Deccan rivers on the other hand are rainfed and therefore fluctuate in volume. Many of these are non-perennial. The Coastal streams, especially on the west coast are short in length and have limited catchment areas. Most of them are non-perennial. The streams of inland drainage basin of western Rajasthan are few and far apart. Most of them are of an ephemeral character.

The main Himalayan river systems are those of the Indus and the Ganga-Brahmaputra-Meghna system. The Indus, which is one of the great rivers of the world, rises near Mansarovar in Tibet and flows through India and thereafter through Pakistan and finally falls in the Arabian sea near Karachi. Its important tributaries flowing in Indian territory are the Sutlej (originating in Tibet), the Beas, the Ravi, the Chenab and the Jhelum. The Ganga-Brahmaputra-Meghna is another important system of which the principal sub-basins are those of Bhagirathi and the Alaknanda, which join at Dev Prayag to form the Ganga. It traverses through Uttaranchal, Uttar Pradesh, Bihar and West Bengal States. Below Rajmahal hills, the Bhagirathi, which used to be the main course in the past, takes off, while the Padma continues eastward and enters Bangladesh. The Yamuna, the Ramganga, the Ghaghra, the Gandak, the Kosi, the Mahananda and the Sone are the important tributaries of the Ganga. Rivers Chambal and Betwa are the important sub-tributaries, which join Yamuna before it meets the Ganga. The Padma and the Brahmaputra join at Bangladesh and continue to flow as the Padma or Ganga. The Brahmaputra rises in Tibet, where it is known as Tsangpo and runs a long distance till it crosses over into India in Arunachal Pradesh under the name of Dihang. Near Passighat, the Debang and Lohit join the river Brahmaputra and the combined river runs all along the Assam in a narrow valley. It crosses into Bangladesh downstream of Dhubri.

The principal tributaries of Brahmaputra in India are the Subansiri, Jia Bhareli, Dhansiri, Puthimari, Pagladiya and the Manas. The Brahmaputra in Bangladesh receives the flow of Tista, etc., and finally falls into Ganga. The Barak river, the Head stream of Meghna, rises in the hills in Manipur. The important tributaries of the river are Makku, Trang, Tuivai, Jiri, Sonai, Rukni, Katakhal, Dhaleswari, Langachini, Maduva and Jatinga. Barak continues in Bangladesh till the combined Ganga—Brahmaputra join it near Bhairab Bazar.

In the Deccan region, most of the major river systems flowing generally in east direction fall into Bay of Bengal. The major east flowing rivers are Godavari, Krishna, Cauvery, Mahanadi, etc. Narmada and Tapti are major West flowing rivers.

The Godavari in the southern Peninsula has the second largest river basin covering 10 per cent of the area of India. Next to it is the Krishna basin in the region, while the Mahanadi has the third largest basin. The basin of the Narmada in the uplands of the Deccan, flowing to the Arabian Sea, and of the Kaveri in the south, falling into the Bay of Bengal are about the same size, though with different character and shape.

There are numerous coastal rivers, which are comparatively small. While only handful of such rivers drain into the sea near the delta of east coast, there are as many as 600 such rivers on the west coast.

A few rivers in Rajasthan do not drain into the sea. They drain into salt lakes and get lost in sand with no outlet to sea. Besides these, there are the desert rivers which flow for some distance and are lost in the desert. These are Luni, Machhu, Rupen, Saraswati, Banas, Ghaggar and others.

CLIMATE

The climate of India may be broadly described as tropical monsoon type. There are four seasons: (i) winter (January-February), (ii) hot weather summer (March-May); (iii) rainy south-western monsoon (June-September) and (iv) post-monsoon, also known as north-east monsoon in the southern Peninsula (October-December). India's

climate is affected by two seasonal winds - the north-east monsoon and the south-west monsoon. The north-east monsoon commonly known as winter monsoon blows from land to sea whereas south-west monsoon known as summer monsoon blows from sea to land after crossing the Indian Ocean, the Arabian Sea and the Bay of Bengal. The south-west monsoon brings most of the rainfall during the year in the country.

FLORA

With a wide range of climatic conditions from the torrid to the arctic, India has a rich and varied vegetation, which only a few countries of comparable size possess. India can be divided into eight distinct-floristic-regions, namely, the western Himalayas, the eastern Himalayas, Assam, the Indus plain, the Ganga plain, the Deccan, Malabar and the Andamans.

The Western Himalayan region extends from Kashmir to Kumaon. Its temperate zone is rich in forests of chir, pine, other conifers and broad-leaved temperate trees. Higher up, forests of deodar, blue pine, spruce and silver fir occur. The alpine zone extends from the upper limit of the temperate zone of about 4,750 metres or even higher. The characteristic trees of this zone are high-level silver fir, silver birch and junipers. The eastern Himalayan region extends from Sikkim eastwards and embraces Darjeeling, Kurseong and the adjacent tract. The temperate zone has forests of oaks, laurels, maples, rhododendrons, alder and birth. Many conifers, junipers and dwarf willows also occur here. The Assam region comprises the Brahamaputra and the Surma valleys with evergreen forests, occasional thick clumps of bamboos and tall grasses. The Indus plain region comprises the plains of Punjab, western Rajasthan and northern Gujarat. It is dry and hot and supports natural vegetation. The Ganga plain region covers the area which is alluvial plain and is under cultivation for wheat, sugarcane and rice. Only small areas support forests of widely differing types. The Deccan region comprises the entire table land of the Indian Peninsula and supports vegetation of various kinds from scrub jungles to mixed deciduous forests. The Malabar region covers the excessively humid belt of mountain country parallel to the west coast of the Peninsula. Besides being rich in forest vegetation, this region produces important commercial corps, such as coconut, betelnut, pepper, coffee and tea, rubber and cashewnut. The Andaman region abounds in evergreen, mangrove, beach and diluvial forests. The Himalayan region extending from Kashmir to Arunachal Pradesh through Nepal, Sikkim, Bhutan, Meghalaya and Nagaland and the Deccan Peninsula is rich in endemic flora, with a large number of plants which are not found elsewhere.

India is rich in flora. Available data place India in the tenth position in the world and fourth in Asia in plant diversity. From about 70 per cent geographical area surveyed so far, over 46,000 species of plants have been described by the Botanical Survey of India (BSI), Kolkata. The vascular flora, which forms the conspicuous vegetation cover, comprises 15,000 species. The flora of the country is being studied by BSI and its nine circle / field offices located throughout the country along with certain universities and research institutions.

Ethno-botanical study deals with the utilisation of plants and plant products by ethnic races. A scientific study of such plants has been made by BSI. A number of detailed ethno-botanical explorations have been conducted in different tribal areas of the country. More than 800 plant species of ethno-botanical interest have been collected and identified at different centres.

Owing to destruction of forests for agricultural, industrial and urban development, several Indian plants are facing extinction. About 1,336 plant species are considered vulnerable and endangered. About 20 species of higher plants are categorised as possibly extinct as these have not been sighted during the last 6-10 decades. BSI brings out an inventory of endangered plants in the form of a publication titled Red Data Book.

FAUNA

The Zoological Survey of India (ZSI), with its headquarters in Kolkata and 16 regional stations is responsible for surveying the faunal resources of India. Possessing a tremendous diversity of climate and physical conditions, India has great variety of fauna numbering over 89,000 species. Of these, protista number 2,577, mollusca 5,070, anthropoda 68,389, amphibian 209, mammalian 390, reptilian 456, members of protochordata 119, pisces 2,546, aves 1,232 and other invertebrates 8,329.

The mammals include the majestic elephant, the gaur or Indian bison–the largest of existing bovines, the great Indian rhinoceros, the gigantic wild sheep of the Himalayas, the swamp deer, the thamin spotted deer, nilgai, the four-horned antelope, the Indian antelope or black-buck – the only representatives of these genera. Among the cats, the tiger and lion are the most magnificent of all; other splendid creatures such as the clouded leopard, the snow leopard, the marbled cat, etc., are also found. Many other species of mammals are remarkable for their beauty, colouring, grace and uniqueness. Several birds, like pheasants, geese, ducks, myanahs, parakeets, pigeons, cranes, hornbills and sunbirds inhabit forests and wetlands.

Rivers and lakes harbour crocodiles and gharials, the latter being the only representative of crocodilian order in the world. The salt water crocodile is found along the eastern coast and in the Andaman and Nicobar Islands. A project for breeding crocodiles which started in 1974, has been instrumental in saving the crocodile from extinction.

The great Himalayan range has a very interesting variety of fauna that includes the wild sheep and goats, markhor, ibex, shrew and tapir. The panda and the snow leopard are found in the upper reaches of the mountains.

Depletion of vegetative cover due to expansion of agriculture, habitat destruction, over-exploitation, pollution, introduction of toxic imbalance in community structure, epidemics, floods, droughts and cyclones, contribute to the loss of flora and fauna. More than 39 species of mammals, 72 species of birds, 17 species of reptiles, three species of amphibians, two species of fish and a large number of butterflies, moth and beetles are considered vulnerable and endangered.

DEMOGRAPHIC BACKGROUND

CENSUS

The Census of India 2001, is historic and epoch making being the first census of the twenty-first century and the third millennium. It reveals benchmark data on the state of abundant human resources available in the country, their demography, culture and economic structure at a juncture, which marks a centennial and millenial transition.

The population enumeration of 2001 census was undertaken during 9-28 February 2001 with a revisional round from 1-5 March 2001. The Census moment, the referral time at which the snapshot of the population is taken was 00.00 hours of

the 1 March 2001. Until the 1991 Census, the sunrise of 1 March was taken to be the census moment. The houseless population, as has been the usual practice, was enumerated on the night of 28 February 2001.

POPULATION

India's population as on 1 March 2001 stood at 1,028 million (532.1 million males and 496.4 million females). India accounts for a meagre 2.4 per cent of the world surface area of 135.79 million sq km. Yet, it supports and sustains a whopping 16.7 per cent of the world population.

The population of India, which at the turn of the twentieth century was around 238.4 million, increased to reach 1,028 million at the dawn of the twenty-first century. The population of India as recorded at each decennial census from 1901 has grown steadily except for a decrease during 1911-21. Decadal growth of population from 1901 is shown in table 1.1.

Table 1.2 gives the selected indicators of population growth in different States and Union Territories. The per cent decadal growth of population in the inter-censal period 1991-2001 varies from a low of 9.43 in Kerala to a very high 64.53 in Nagaland. Delhi with 47.02 per cent, Chandigarh with 40.28 per cent and Sikkim with 33.06 per cent registered very high growth rates. In addition to Kerala, Tamil Nadu and Andhra Pradesh registered low growth rates during 1991-2001.

POPULATION DENSITY

One of the important indices of population concentration is the density of population. It is defined as the number of persons per sq km. The population density of India in 2001 was 324 per sq km.

The density of population was increased in all States and Union Territories between 1991 and 2001. Among major states, West Bengal is still the most thickly populated state with a population density of 903 in 2001. Bihar is now the second highest densely populated state pushing Kerala to the third place. Ranking of the States and Union Territories by density is shown in table 1.3.

SEX RATIO

Sex ratio, defined as the number of females per thousand males is an important social indicator to measure the extent of prevailing equality between males and females in a society at a given point of time. The sex ratio in the country had always remained unfavourable to females. It was 972 at the beginning of the 20^{th} century and thereafter showed continuous decline until 1941. The sex ratio from 1901-2001 is given in table 1.4.

LITERACY

For the purpose of census 2001, a person aged seven and above, who can both read and write with understanding in any language, is treated as literate. A person, who can only read but cannot write, is not literate. In the censuses prior to 1991, children below five years of age were necessarily treated as illiterates.

The results of 2001 census reveal that there has been an increase in literacy in the country. The literacy rate in the country is 64.84 per cent, 75.26 for males and 53.67 for females. The steady improvement in literacy is apparent from the table 1.5.

Kerala retained its position by being on top with a 90.86 per cent literacy rate, closely followed by Mizoram (88.80 per cent) and Lakshadweep (86.66 per cent).

TABLE 1.1 : POPULATION 1901-2001

Census years	Population	Decadal Growth		Change in decadal growth		Average annual exponential growth rate (per cent)	Progressive growth rate over 1901 (per cent)
		Absolute	Per cent	Absolute	Per cent		
1	2	3	4	5	6	7	8
1901	23,83,96,327	–	–	–	–	–	–
1911	25,20,93,390	1,36,97,063	5.75	–	–	0.56	5.75
1921	25,13,21,213	-7,72,177	-0.31	-1,44,69,240	-6.05	-0.03	5.42
1931	27,89,77,238	2,76,56,025	11.00	2,84,28,202	11.31	1.04	17.02
1941	31,86,60,580	3,96,83,342	14.22	1,20,27,317	3.22	1.33	33.67
1951[1]	36,10,88,090	4,24,27,510	13.31	27,44,168	-0.91	1.25	51.47
1961[1]	43,92,34,771	7,81,46,681	21.64	3,57,19,171	8.33	1.96	84.25
1971	54,81,59,652	10,89,24,881	24.80	3,07,78,200	3.16	2.22	129.94
1981[2]	68,33,29,097	13,51,69,445	24.66	2,62,44,564	-0.14	2.20	186.64
1991[3]	84,64,21,039	16,30,91,942	23.87	2,79,22,497	-0.79	2.14	255.05
2001[4]	1,02,87,37,436	18,23,16,397	21.54	1,92,24,455	-2.33	1.95	331.47

Notes :

1. In working out 'Decadal Growth' and 'Percentage Decadal Growth' for India 1941-51 and 1951-61 the population of Tuensang district for 1951 (7,025) and the population of Tuensang (83,501) and Mon (5,774) districts for 1961 Census of Nagaland state have not been taken into account as the areas went in for census for the first time in 1951 and the same are not comparable.
2. The 1981 Census could not be held owing to disturbances in Assam. Hence the population figures for 1981 of Assam have been worked out by 'interpolation'.
3. The 1991 Census could not be held owing to disturbances in Jammu and Kashmir. Hence the population figures for 1991 of Jammu and Kashmir have been worked out by 'interpolation'.
4. The population figures of 2001 includes estimated figures for those of the three sub-divisions, viz., Mao Maram, Paomata and Pural of Senapati district of Manipur as census result of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

TABLE 1.2 : TOTAL POPULATION AND POPUATION GROWTH DURING 1991-2001,
INDIA / STATE / UNION TERRITORY

Sl. No.	India State / Union territory	Total Population						Population growth
		1991			2001			1991-2001
		Person	Males	Females	Person	Males	Females	
1	2	3	4	5	6	7	8	9
	India**	846,421,039	439,358,440	407,062,599	1,028,737,436	532,223,090	496,514,346	21.54
1.	Jammu and Kashmir*	7,837,051	4,142,082	3,694,969	10,143,700	5,360,926	4,782,774	29.43
2.	Himachal Pradesh	5,170,877	2,617,467	2,553,410	6,077,900	3,087,940	2,989,960	17.54
3.	Punjab	20,281,969	10,778,034	9,503,935	24,358,999	12,985,045	11,373,954	20.10
4.	Chandigarh	642,015	358,614	283,401	900,635	506,938	393,697	40.28
5.	Uttrakhand	7,050,634	3,640,895	3,409,739	8,489,349	4,325,924	4,163,425	20.41
6.	Haryana	16,463,648	8,827,474	7,636,174	21,144,564	11,363,953	9,780,611	28.43
7.	Delhi	9,420,644	5,155,512	4,265,132	13,850,507	7,607,234	6,243,273	47.02
8.	Rajasthan	44,005,990	23,042,780	20,963,210	56,507,188	29,420,011	27,087,177	28.41
9.	Uttar Pradesh	132,061,653	70,396,062	61,665,591	166,197,921	87,565,369	78,632,552	25.85
10.	Bihar	64,530,554	33,838,238	30,692,316	82,998,509	43,243,795	39,754,714	28.62
11.	Sikkim	406,457	216,427	190,030	540,851	288,484	252,367	33.06
12.	Arunachal Pradesh	864,558	465,004	399,554	1,097,968	579,941	518,027	27.00
13.	Nagaland	1,209,546	641,282	568,264	1,990,036	1,047,141	942,895	64.53
14.	Manipur**	1,837,149	938,359	898,790	2,293,896	1,161,952	1,131,944	24.86
15.	Mizoram	689,756	358,978	330,778	888,573	459,109	429,464	28.82
16.	Tripura	2,757,205	1,417,930	1,339,275	3,199,203	1,642,225	1,556,978	16.03
17.	Meghalaya	1,774,778	907,687	867,091	2,318,822	1,176,087	1,142,735	30.65
18.	Assam	22,414,322	11,657,989	10,756,333	26,655,528	13,777,037	12,878,491	18.92
19.	West Bengal	68,077,965	35,510,633	32,567,332	80,176,197	41,465,985	38,710,212	17.77

1	2	3	4	5	6	7	8	9
20.	Jharkhand	21,843,911	11,363,853	10,480,058	26,945,829	13,885,037	13,060,792	23.36
21.	Orissa	31,659,736	16,064,146	15,595,590	36,804,660	18,660,570	18,144,090	16.25
22.	Chhattisgarh	17,614,928	8,872,620	8,742,308	20,833,803	10,474,218	10,369,585	18.27
23.	Madhya Pradesh	48,566,242	25,394,673	23,171,569	60,348,023	31,443,652	28,904,371	24.26
24.	Gujarat	41,309,582	21,355,209	19,954,373	50,671,017	26,385,577	24,285,440	22.66
25.	Daman and Diu	101,586	51,595	49,991	158,204	92,512	65,692	55.73
26.	Dadra and Nagar Haveli	138,477	70,953	67,524	220,490	121,666	98,824	59.22
27.	Maharashtra	78,937,187	40,825,618	38,111,569	96,878,627	50,400,596	46,478,031	22.73
28.	Andhra Pradesh	66,508,008	33,724,581	32,783,427	76,210,007	38,527,413	37,682,594	14.59
29.	Karnataka	44,977,201	22,951,917	22,025,284	52,850,562	26,898,918	25,951,644	17.51
30.	Goa	1,169,793	594,790	575,003	1,347,668	687,248	660,420	15.21
31.	Lakshadweep	51,707	26,618	25,089	60,650	31,131	29,519	17.30
32.	Kerala	29,098,518	14,288,995	14,809,523	31,841,374	15,468,614	16,372,760	9.43
33.	Tamil Nadu	55,858,946	28,298,975	27,559,971	62,405,679	31,400,909	31,004,770	11.72
34.	Pondicherry	807,785	408,081	399,704	974,345	486,961	487,384	20.62
35.	Andaman and Nicobar Islands	280,661	154,369	126,292	356,152	192,972	163,180	26.90

Note : * The 1991 census figures of Jammu & kashmir are interpolated as no census was conducted there due to disturbances.

** India and Manipur figures include estimated figures for those of the three sub-divisions viz., Mao Maram, Paomata and Puru of Senapati district of Manipur as census resuts of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

Source : Office of the Registrar General, India

Bihar with a literacy rate of 47.00 per cent ranks last in the country preceded by Jharkhand (53.56 per cent) and Jammu and Kashmir (55.52 per cent). Kerala also occupies the top spot in the country both in male literacy with 94.24 per cent and female literacy with 87.72 per cent. On the contrary, Bihar has recorded the lowest literacy rates both in case of males (59.68 per cent) and females (33.12 per cent). Table 1.6 shows the literacy rate among persons, male and female in States and UTs, and their ranking.

TABLE 1.3 : STATES AND UNION TERRITORIES BY DENSITY

Rank in 2001	State / Union territories	Density 2001	1991	Rank in 1991
1	2	3	4	5
1.	Delhi	9,340	6,352	1
2.	Chandigarh	7,900	5,632	2
3.	Pondicherry	2,034	1,683	5
4.	Lakshadweep	1,895	1,616	3
5.	Daman and Diu	1,413	907	4
6.	West Bengal	903	767	6
7.	Bihar	881	685	7
8.	Kerala	819	749	9
9.	Uttar Pradesh	690	548	8
10.	Punjab	484	403	10
11.	Tamil Nadu	480	429	11
12.	Haryana	478	372	12
13.	Dadra and Nagar Haveli	449	282	14
14.	Goa	364	316	13
15.	Assam	340	286	15
16.	Jharkhand	338	274	17
17.	Maharashtra	315	257	16
18.	Tripura	305	263	18
19.	Andhra Pradesh	277	242	19
20.	Karnataka	276	235	20
21.	Gujarat	258	211	21
22.	Orissa	236	203	22
23.	Madhya Pradesh	196	158	23
24.	Rajasthan	165	129	24
25.	Uttrakhand	159	133	25
26.	Chhattisgarh	154	130	26
27.	Nagaland	120	73	27
28.	Himachal Pradesh	109	93	28
29.	Manipur*	111	82	30
30.	Meghalaya	103	79	29
31.	Jammu and Kashmir	100	77	31
32.	Sikkim	76	57	32
33.	Andaman and Nicobar Islands	43	34	33

34.	Mizoram	42	33	34
35.	Arunachal Pradesh	13	10	35

Notes :

* Manipur figures include estimated figures for those of the three sub-divisions, viz., Mao Maram, Paomata and Purul of Senapti district of Manipur as census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

TABLE 1.4 : SEX RATIO : 1901-2001

Census Year	Sex Ratio (females per 1,000 males)
1901	972
1911	964
1921	955
1931	950
1941	945
1951	946
1961	941
1971	930
1981	934
1991	926
2001	933

Notes :

1. For 1981, interpolated figures for Assam have been used.
2. For 1991, interpolated figures based on final population of 2001 census for Jammu and Kashmir have been used.
3. India figures for 2001 census exclude those of the three sub-divisions, viz., Mao Maram, Paomata and Purul of Senapati district of Manipur as population Census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

TABLE 1.5 : LITERACY RATE : 1951-2001

Census Year	Persons	Males	Females
1951	18.33	27.16	8.86
1961	28.3	40.40	15.35
1971	34.45	45.96	21.97
1981	43.57	56.38	29.76
1991	52.21	64.13	39.29
2001	64.84	75.26	53.67

Notes :

1. Literacy rates for 1951, 1961 and 1971 Censuses relates to population aged five years and above. The rates for the 1981, 1991 and 2001 Censuses relate to the population aged seven years and above.
2. The 1981 Literacy rates exclude Assam where the 1981 Census could not be conducted.
3. The 1991 Literacy rates exclude Jammu and Kashmir where the 1991 Census could not be conducted due to disturbed conditions.

TABLE 1.6 : RANKING OF STATES/UTs BY LITERACY RATE AMONG PERSONS, MALES AND FEMALES, 2001 CENSUS

	Persons		Males		Females	
Rank	State/ Union Territories	Literacy Rate	State/ Union Territories	Literacy Rate	State/ Union Territories	Literacy Rate
1	2	3	4	5	6	7
1.	Kerala	90.86	Kerala	94.24	Kerala	87.72
2.	Mizoram	88.80	Lakshadweep	92.53	Mizoram	86.75
3.	Lakshadweep	86.66	Mizoram	90.72	Lakshadweep	80.47
4.	Goa	82.01	Pondicherry	88.62	Chandigarh	76.47
5.	Chandigarh	81.94	Goa	88.42	Goa	75.37
6.	Delhi	81.67	Delhi	87.33	Andaman & Nicobar Islands	75.24
7.	Andaman and Nicobar Islands	81.30	Daman and Diu	86.76	Delhi	74.71
8.	Pondicherry	81.24	Andaman and Nicobar Islands	86.33	Pondicherry	73.90
9.	Daman and Diu	78.18	Chandigarh	86.14	Himachal Pradesh	67.42
10.	Maharashtra	76.88	Maharashtra	85.97	Maharashtra	67.03
11.	Himachal Pradesh	76.48	Himachal Pradesh	85.35	Daman and Diu	65.61
12.	Tamil Nadu	73.45	Uttaranchal	83.28	Tripura	64.91
13.	Tripura	73.19	Tamil Nadu	82.42	Tamil Nadu	64.33
14.	Uttrakhand	71.62	Tripura	81.02	Punjab	63.36
15.	Manipur[1]	70.53	Manipur[1]	80.33	Nagaland	61.46
16.	Punjab	69.65	Gujarat	79.66	Manipur[1]	60.53
17.	Gujarat	69.14	Haryana	78.49	Sikkim	60.40
18.	Sikkim	68.81	Chhattisgarh	77.38	Uttaranchal	59.63
19.	West Bengal	68.64	West Bengal	77.02	West Bengal	59.61
20.	Haryana	67.91	Karnataka	76.10	Meghalaya	59.61

1	2	3	4	5	6	7
21.	Karnataka	66.64	Madhya Pradesh	76.06	Gujarat	57.80
22.	Nagaland	66.59	Sikkim	76.04	Karnataka	56.87
23.	Chhattisgarh	64.66	Rajasthan	75.70	Haryana	55.73
24.	Madhya Pradesh	63.74	Orissa	75.35	Assam	54.61
25.	Assam	63.25	Punjab	75.23	Chhattisgarh	51.85
26.	Orissa	63.08	Assam	71.28	Orissa	50.51
27.	Meghalaya	62.56	Dadra and Nagar Haveli	71.18	Andhra Pradesh	50.43
28.	Andhra Pradesh	60.47	Nagaland	71.16	Madhya Pradesh	50.29
29.	Rajasthan	60.41	Andhra Pradesh	70.32	Rajasthan	43.85
30.	Dadra and Nagar Haveli	57.63	Uttar Pradesh	68.82	Arunachal Pradesh	43.53
31.	Uttar Pradesh	56.27	Jharkhand	67.30	Jammu and Kashmir	43.00
32.	Jammu and Kashmir	55.52	Jammu and Kashmir	66.60	Uttar Pradesh	42.22
33.	Arunachal Pradesh	54.34	Meghalaya	65.43	Dadra and Nagar Haveli	40.23
34.	Jharkhand	53.56	Arunachal Pradesh	63.83	Jharkhand	38.87
35.	Bihar	47.00	Bihar	59.68	Bihar	33.12

Notes :

1 Manipur figures exclude those of the three sub-divisions, viz., Mao Maram, Paomata and Purul of Senapati district of Manipur as census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

Literacy rates relate to the population aged seven years and above.

TABLE 1.7 : TOTAL POPULATION AND PERCENTAGE OF SCHEDULED CASTES AND SCHEDULED TRIBES : 2001 CENSUS

Sl. No.	India / State / Union Territory	Total Population ('000)	Scheduled Caste Population ('000)	Scheduled Caste Percentage of total population	Scheduled Tribe Population ('000)	Scheduled Tribe Percentage of total population
1	2	3	4	5	6	7
	INDIA[1]	**1,028,610**	**166,636**	**16.20**	**84,326**	**8.20**
1.	Jammu and Kashmir	10,144	770	7.59	1,106	10.90
2.	Himachal Pradesh	6,078	1,502	24.72	245	4.02
3.	Punjab	24,359	7,029	28.85	0	0.00
4.	Chandigarh	901	158	17.50	0	0.00
5.	Uttrakhand	8,489	1,517	17.87	256	3.02
6.	Haryana	21,145	4,091	19.35	0	0.00
7.	Delhi	13,851	2,343	16.92	0	0.00
8.	Rajasthan	56,507	9,694	17.16	7,098	12.56
9.	Uttar Pradesh	166,198	35,148	21.15	108	0.06
10.	Bihar	82,999	13,049	15.72	758	0.91
11.	Sikkim	541	27	5.02	111	20.60
12.	Arunachal Pradesh	1,098	6	0.56	705	64.22
13.	Nagaland	1,990	0	0.00	1,774	89.15
14.	Manipur[1]	2,167	60	2.77	741	34.20
15.	Mizoram	889	0	0.03	839	94.46
16.	Tripura	3,199	556	17.37	993	31.05
17.	Meghalaya	2,319	11	0.48	1,993	85.94
18.	Assam	26,656	1,826	6.85	3,309	12.41
19.	West Bengal	80,176	18,453	23.02	4,407	5.50
20.	Jharkhand	26,946	3,189	11.84	7,087	26.30
21.	Orissa	36,805	6,082	16.53	8,145	22.13
22.	Chhattisgarh	20,834	2,419	11.61	6,617	31.76
23.	Madhya Pradesh	60,348	9,155	15.17	12,233	20.27
24.	Gujarat	50,671	3,593	7.09	7,481	14.76
25.	Daman and Diu	158	5	3.06	14	8.85
26.	Dadra and Nagar Haveli	220	4	1.86	137	62.24
27.	Maharashtra	96,879	9,882	10.20	8,577	8.85
28.	Andhra Pradesh	76,210	12,339	16.19	5,024	6.59
29.	Karnataka	52,851	8,564	16.20	3,464	6.55
30.	Goa	1,348	24	1.77	1	0.04
31.	Lakshadweep	61	0	0.00	57	94.51
32.	Kerala	31,841	3,124	9.81	364	1.14
33.	Tamil Nadu	62,406	11,858	19.00	651	1.04
34.	Pondicherry	974	158	16.19	0	0.00
35.	Andaman & Nicobar Islands	356	0	0.00	29	8.27

Note :

1. India and Manipur figures exclude those of the three sub-divisions, viz., Mao Maram, Paomata and Purul of Senapati district of Manipur as census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

TABLE 1.8 : RURAL AND URBAN POPULATION

Census Year	Population (Million)		Percentage of total population	
	Rural	Urban	Rural	Urban
1	2	3	4	5
1901	213	26	89.2	10.8
1911	226	26	89.7	10.3
1921	223	28	88.8	11.2
1931	246	33	88.0	12.0
1941	275	44	86.1	13.9
1951	299	62	82.7	17.3
1961	360	79	82.0	18.0
1971	439	109	80.1	19.9
1981	524	159	76.7	23.3
1991	629	218	74.3	25.7
2001	743	286	72.2	27.8

Note :

1. India and Manipur figures are final and include estimated figures for those of the three sub-divisions, viz., Mao Maram, Paomata and Purul of Senapati district of Manipur as census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
2. The 1991 Census could not be held owing to disturbed conditions prevailing in Jammu and Kashmir. Hence the population figures for 1991 of Jammu and Kashmir have been worked out by 'interpolation' on the basis of 2001 final population.
3. The 1981 census could not be held in Assam. The figures for 1981 for Assam have been worked out by interpolation.

TABLE 1.9 : POPULATION BY CLASS OF TOWN, INDIA-2001 CENSUS

(in 000's)

	Class of Town	2001
I	1,00,000 an above	178,224
II	50,000-99,999	34,452
III	20,000-49,999	42,119
IV	10,000-19,999	22,614
V	5,000-9,999	7,890
VI	Less than 5,000	821
	All Classes	286,120
	Urban population as percentage to total Population	27.82

TABLE 1.10 : DISTRIBUTION OF VILLAGES ACCORDING TO POPULATION 2001 CENSUS AND TOTAL NUMBER OF INHABITED VILLAGES

Sl. No.	States / UTs	10000 and above	5,000 9,999	2,000-4,999	1,000-1,999	500-999	200-499	Less than 200	Total No. of inhabited villages.
1	2	3	4	5	6	7	8	9	10
1.	Jammu and Kashmir[@]	10	135	886	1,546	1,664	1,499	677	6,417
2.	Himachal Pradesh	1	8	174	660	2,094	5,645	8,913	17,495
3.	Punjab	26	273	1,987	3,405	3,378	2,130	1,079	12,278
4.	Chandigarh	2	6	7	2	2	1	3	23
5.	Uttrakhand	13	69	350	752	1,890	4,912	7,775	15,761
6.	Haryana	97	504	2,015	2,091	1,205	582	270	6,764
7.	Delhi	24	26	60	29	9	4	6	158
8.	Rajasthan	100	661	4,660	8,777	11,058	9,151	5,346	39,753
9.	Uttar Pradesh	296	2,266	16,573	27,218	25,614	16,879	9,096	97,942
10.	Bihar	630	2,306	8,571	10,113	8,498	5,662	3,235	39,015
11.	Sikkim	0	9	40	120	157	82	42	450
12.	Arunachal Pradesh	0	3	26	126	266	682	2,760	3,863
13.	Nagaland	5	50	171	253	372	323	104	1,278
14.	Manipur*	6	28	157	202	326	731	749	2,199
15.	Mizoram	1	1	31	76	198	258	142	707
16.	Tripura	28	106	370	188	99	55	12	858
17.	Meghalaya	0	4	60	185	690	2,090	2,753	5,782
18.	Assam	19	185	2,495	5,439	6,233	6,018	4,735	25,124
19.	West Bengal	354	1,526	6,819	8,490	8,930	7,553	4,273	37,945
20.	Jharkhand	28	174	1,642	4,173	7,442	9,234	6,661	29,354
21.	Orissa	5	180	2,404	6,814	11,428	14,054	12,644	47,529

1	2	3	4	5	6	7	8	9	10
22.	Chhattisgarh	6	80	1,264	4,185	6,465	5,498	2,246	19,744
23.	Madhya Pradesh	19	362	3,551	10,434	16,277	14,330	7,144	52,117
24.	Gujarat	153	807	4,154	5,615	4,262	2,297	778	18,066
25.	Daman and Diu	2	5	5	4	5	2	0	23
26.	Dadra and Nagar Haveli	0	7	28	15	12	7	1	70
27.	Maharashtra	262	1,018	5,862	11,570	12,074	7,367	2,942	41,095
28.	Andhra Pradesh	498	1,788	6,915	6,475	4,467	3,402	3,068	26,613
29.	Karnataka	131	703	4,024	6,378	7,367	5,563	3,315	27,481
30.	Goa	3	23	96	77	56	60	32	347
31.	Lakshadweep	1	2	3	0	0	1	1	8
32.	Kerala	1,072	207	69	10	0	4	2	1,364
33.	Tamil Nadu	168	1,254	4,870	4,484	2,801	1,344	479	15,400
34.	Pondicherry	2	20	45	18	7	0	0	92
35.	Andaman and Nicobar Islands	0	2	23	52	62	90	272	501
ALL INDIA		**3,962**	**14,798**	**80,407**	**129,976**	**145,408**	**127,510**	**91,555**	**593,616**

Note :

@ India and Jammu & Kashmir State excludes the villages of the areas under unlawful occupation of Pakistan and China where Census could not be taken.

* India and Manipur excludes villages for those of the three sub-divisions viz. Mao Maram, Paomata and Purul of Senapati district of Manipur as census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

Source : Office of the Registrar General India.

TABLE 1.11 : POPULATION OF MILLION PLUS CITIES/TOWNS

		Population			0-6 Population			Literates		
Sl.No.	City/Town	Person	Male	Female	Person	Male	Female	Person	Male	Female
1	2	3	4	5	6	7	8	9	10	11
1.	Greater Mumbai (M Corp.)	11,978,450	6,619,966	5,358,484	1,364,423	709,777	654,646	9,207,877	5,388,552	3,819,325
2.	DMC (U) (M Corp.)	9,879,172	5,412,497	4,466,675	1,352,656	724,171	628,485	7,075,280	4,110,213	2,965,067
3.	Kolkata (M Corp.)	4,572,876	2,500,040	2,072,836	390,282	202,527	187,755	3,382,103	1,925,008	1,457,095
4.	Chennai (M Corp.)	4,343,645	2,219,539	2,124,106	433,340	219,720	213,620	3,336,695	1,799,981	1,536,714
5.	Bangalore (M Corp.)	4,301,326	2,242,835	2,058,491	484,982	249,652	235,330	3,265,702	1,787,677	1,478,025
6.	Hyderabad (M Corp.)	3,637,483	1,883,064	1,754,419	463,150	238,386	224,764	2,498,234	1,374,955	1,123,279
7.	Ahmedabad (M Corp.)	3,520,085	1,867,249	1,652,836	441,022	240,797	200,225	2,552,731	1,447,380	1,105,351
8.	Kanpur (M Corp.)	2,551,337	1,374,121	1,177,216	317,756	171,263	146,493	1,758,807	997,001	761,806
9.	Pune (M Corp.)	2,538,473	1,321,338	1,217,135	302,960	158,672	144,288	1,930,063	1,064,508	865,555
10.	Surat (M Corp.)	2,433,835	1,372,415	1,061,420	340,582	186,746	153,836	1,736,939	1,043,703	693,236
11.	Lucknow (M Corp.)	2,185,927	1,156,151	1,029,776	273,401	143,232	130,169	1,474,733	827,793	646,940
12.	Nagpur (M Corp.)	2,052,066	1,059,765	992,301	249,827	129,283	120,544	1,609,126	873,739	735,387
13.	Jaipur (M Corp.)	2,322,575	1,237,765	1,084,810	352,661	187,351	165,310	1,537,850	908,969	628,881
14.	Indore (M Corp.)	1,474,968	774,540	700,428	200.081	105,478	94,603	1,064,912	598,339	466,573
15.	Bhopal (M Corp.)	1,437,354	757,408	679,946	208,587	108,172	100,415	979,770	555,051	424,719
16.	Ludhiana (M Corp.)	1,398,467	793,142	605,325	169,273	93,050	76,223	981,383	573,886	407,497

	Literates	Population			0-6 Population					
Sl.No.	City/Town	Person	Male	Female	Person	Male	Female	Person	Male	Female
1	2	3	4	5	6	7	8	9	10	11
17.	Patna (M Corp.)	1,366,444	746,344	620,100	182,037	96,034	86,003	961,681	564,625	397,056
18.	Vadodara (M Corp.)	1,306,227	684,013	622,214	148,034	80,610	67,424	1,014,014	557,051	456,963
19.	Agra (M Corp.)	1,275,134	690,599	584,535	179,411	96,850	82,561	766,860	452,770	314,090
20.	Thane (M Corp.)	1,262,551	675,147	587,404	161,698	84,334	77,364	973,195	551,086	422,109
21.	Kalyan-Dombivli (M Corp.)	1,193,512	633,508	560,004	144,097	75,256	68,841	944,745	525,907	418,838
22.	Varanasi (M Corp.)	1,091,918	582,096	509,822	161,172	84,256	76,916	670,367	392,103	278,264
23.	Nashik (M Corp.)	1,077,236	575,737	501,499	147,919	78,579	69,340	802,695	458,005	344,690
24.	Meerut (M Corp.)	1,068,772	568,081	500,691	163,570	87,893	75,677	610,636	355,282	255,354
25.	Faridabad (M Corp.)	1,055,938	581,069	474,869	158,603	85,805	72,798	714,578	430,274	284,304
26.	Pimpri Chinchwad (M Corp.)	1,012,472	547,050	465,422	143,034	75,688	67,346	745,317	431,785	313,532
27.	Haora (M Corp.)	1,007,532	547,068	460,464	94,330	48,678	45,652	768,655	438,450	330,205

TABLE 1.12 : STATES AND UNION TERRITORIES BY POPULATION IN DESCENDING ORDER AND RANK IN 1991 AND 2001 CENSUS

Rank in 2001	State/ Union territories	Population 2001	Per cent to total Population of India 2001	1991	Rank in 1991
1	2	3	4	5	6
1.	Uttar Pradesh	166,197,921	16.16	15.59	1
2.	Maharashtra	96,878,627	9.42	9.33	2
3.	Bihar	82,998,509	8.07	7.62	5
4.	West Bengal	80,176,197	7.79	8.04	3
5.	Andhra Pradesh	76,210,007	7.41	7.86	4
6.	Tamil Nadu	62,405,679	6.07	6.60	6
7.	Madhya Pradesh	60,348,023	5.87	5.74	7
8.	Rajasthan	56,507,188	5.49	5.20	9
9.	Karnataka	52,850,562	5.14	5.31	8
10.	Gujarat	50,671,017	4.93	4.88	10
11.	Orissa	36,804,660	3.58	3.74	11
12.	Kerala	31,841,374	3.10	3.44	12
13.	Jharkhand	26,945,829	2.62	2.58	14
14.	Assam	26,655,528	2.59	2.65	13
15.	Punjab	24,358,999	2.37	2.40	15
16.	Haryana	21,144,564	2.06	1.95	17
17.	Chhattisgarh	20,833,803	2.03	2.08	16
18.	Delhi	13,850,507	1.35	1.11	18
19.	Jammu and Kashmir[2]	10,143,700	0.99	0.93	19
20.	Uttrakhand	8,489,349	0.83	0.84	20
21.	Himachal Pradesh	6,077,900	0.59	0.61	21
22.	Tripura	3,199,203	0.31	0.33	22
23.	Meghalaya	2,318,822	0.23	0.21	24
24.	Manipur[1]	2,293,896	0.22	0.22	23
25.	Nagaland	1,990,036	0.19	0.14	25
26.	Goa	1,347,668	0.13	0.14	26
27.	Arunachal Pradesh	1,097,968	0.11	0.10	27
28.	Pondicherry	974,345	0.09	0.10	28
29.	Chandigarh	900,635	0.09	0.08	29

30.	Mizoram	888,573	0.09	0.08	30
31.	Sikkim	540,851	0.05	0.05	31
32.	Andaman and Nicobar Islands	356,152	0.03	0.03	32
33.	Dadra and Nagar Haveli	220,490	0.02	0.02	33
34.	Daman and Diu	158,204	0.02	0.01	34
35.	Lakshadweep	60,650	0.01	0.01	35

Notes :

1. India and Manipur figures include estimated figures for those of the three sub-divisions viz., Mao Maram, Paomata and Purul of Senepati district of Manipur as census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
2. The 1991 Census could not be held owing to disturbed conditions prevailing in Jammu and Kashmir. Hence the population figures for 1991 of Jammu and Kashmir have been worked out by 'interpolation'.

2 National Symbols

NATIONAL FLAG

THE National flag is a horizontal tricolour of deep saffron (kesaria) at the top, white in the middle and dark green at the bottom in equal proportion. The ratio of width of the flag to its length is two to three. In the centre of the white band is a navy-blue wheel which represents the chakra. Its design is that of the wheel which appears on the abacus of the Sarnath Lion Capital of Ashoka. Its diameter approximates to the width of the white band and it has 24 spokes. The design of the National Flag was adopted by the Constituent Assembly of India on 22 July 1947.

Apart from non-statutory instructions issued by the Government from time to time, display of the National Flag is governed by the provisions of the Emblems and Names (Prevention of Improper Use) Act, 1950 (No. 12 of 1950) and the Prevention of Insults to National Honour Act, 1971 (No. 69 of 1971). The Flag Code of India, 2002 is an attempt to bring together all such laws, conventions, practices and instructions for the guidance and benefit of all concerned.

The Flag Code of India, 2002, takes effect from 26 January 2002 and supersedes the 'Flag Code—Indias' as it existed. As per the provisions of the Flag Code of India, 2002, there shall be no restriction on the display of the National Flag by members of general public, private organisations, educational institutions, etc., except to the extent provided in the Emblems and Names (Prevention of Improper Use) Act, 1950 and the Prevention of Insults to National Honour Act, 1971 and any other law enacted on the subject.

STATE EMBLEM

The state emblem is an adaptation from the Sarnath Lion Capital of Ashoka. In the original, there are four lions, standing back to back, mounted on an abacus with a frieze carrying sculptures in high relief of an elephant, a galloping horse, a bull and a lion separated by intervening wheels over a bell-shaped lotus. Carved out of a single block of polished sandstone, the Capital is crowned by the Wheel of the Law (Dharma Chakra).

In the state emblem, adopted by the Government of India on 26 January 1950, only three lions are visible, the fourth being hidden from view. The wheel appears in relief in the centre of the abacus with a bull on right and a horse on left and the outlines of other wheels on extreme right and left. The bell-shaped lotus has been omitted. The words Satyameva Jayate from Mundaka Upanishad, meaning 'Truth Alone Triumphs', are inscribed below the abacus in Devanagari script.

NATIONAL ANTHEM

The song Jana-gana-mana, composed originally in Bengali by Rabindranath Tagore, was adopted in its Hindi version by the Constituent Assembly as the National Anthem of India on 24 January 1950. It was first sung on 27 December 1911 at the Calcutta Session of the Indian National Congress. The complete song consists of five stanzas. The first stanza contains the full version of the National Anthem :

Jana-gana-mana-adhinayaka, jaya he
Bharata-bhagya-vidhata.

Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchala-Jaladhi-taranga.
Tava shubha name jage,
Tava shubha asisa mange,
Gahe tava jaya gatha,
Jana-gana-mangala-dayaka jaya he
Bharata-bhagya-vidhata.
Jaya he, jaya he, jaya he,
Jaya jaya jaya, jaya he!

Playing time of the full version of the national anthem is approximately 52 seconds. A short version consisting of the first and last lines of the stanza (playing time approximately 20 seconds) is also played on certain occasions. The following is Tagore's English rendering of the anthem :

Thou art the ruler of the minds of all people,
dispenser of India's destiny.

Thy name rouses the hearts of Punjab, Sind,
Gujarat and Maratha,

Of the Dravida and Orissa and Bengal;

It echoes in the hills of the Vindhyas and Himalayas,
mingles in the music of Jamuna and Ganges and is
chanted by the waves of the Indian Sea.

They pray for thy blessings and sing thy praise.

The saving of all people waits in thy hand,
thou dispenser of India's destiny.

Victory, victory, victory to thee.

NATIONAL SONG

The song Vande Mataram, composed in sanskrit by Bankimchandra Chatterji, was a source of inspiration to the people in their struggle for freedom. It has an equal status with Jana-gana-mana. The first political occasion when it was sung was the 1896 session of the Indian National Congress. The following is the text of its first stanza :

Vande Mataram!

Sujalam, suphalam, malayaja shitalam,
Shasyashyamalam, Mataram!
Shubhrajyotsna pulakitayaminim,
Phullakusumita drumadala shobhinim,
Suhasinim sumadhura bhashinim,
Sukhadam varadam, Mataram!

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1 As published in Volume Eight of Sri Aurobindo Birth Centenary Library, Popular Edition 1972

The English translation of the stanza rendered by Sri Aurobindo in prose[1] is :

I bow to thee, Mother,
richly-watered, richly-fruited,
cool with the winds of the south,
dark with the crops of the harvests,
The Mother!
Her nights rejoicing in the glory of the moonlight,
her lands clothed beautifully with her trees in flowering bloom,
sweet of laughter, sweet of speech,
The Mother, giver of boons, giver of bliss.

NATIONAL CALENDAR

The national calendar based on the Saka Era, with Chaitra as its first month and a normal year of 365 days was adopted from 22 March 1957 along with the Gregorian calendar for the following official purposes: (i) Gazette of India, (ii) news broadcast by All India Radio, (iii) calendars issued by the Government of India and (iv) Government communications addressed to the members of the public.

Dates of the national calendar have a permanent correspondence with dates of the Gregorian calendar, 1 Chaitra falling on 22 March normally and on 21 March in leap year.

NATIONAL ANIMAL

The magnificent tiger, Panthera tigris, a striped animal is the national animal of India, it has a thick yellow coat of fur with dark stripes. The combination of grace, strength, ability and enormous power has earned the tiger its pride of place as the national animal of India. Out of eight races of the species known, the Indian race, the Royal Bengal Tiger, is found throughout the country except in the north-western region and also in the neighbouring countries, Nepal, Bhutan and Bangladesh.

NATIONAL BIRD

The Indian peacock, Pavo cristatus, the national bird of India, is a colourful, swan-sized bird, with a fan-shaped crest of feathers, a white patch under the eye and a long, slender neck. The male of the species is more colourful than the female, with a glistening blue breast and neck and a spectacular bronze-green train of around 200 elongated feathers. The female is brownish, slightly smaller than the male and lacks the train. The elaborate courtship dance of the male, fanning out the tail and preening its feathers is a gorgeous sight.

NATIONAL FLOWER

Lotus (Nelumbo Nucipera Gaertn) is the National Flower of India. It is a sacred flower and occupies a unique position in the art and mythology of ancient India and has been an auspicious symbol of Indian culture since time immemorial.

3 The Polity

INDIA, a Union of States, is a Sovereign Socialist Secular Democratic Republic with a parliamentary system of government. The Republic is governed in terms of the Constitution, which was adopted by Constituent Assembly on 26 November 1949 and came into force on 26 January 1950.

The Constitution which envisages parliamentary form of government is federal in structure with unitary features. The President of India is constitutional head of executive of the Union. Article 74(1) of the Constitution provides that there shall be a Council of Ministers with the Prime Minister as head to aid and advise President who shall in exercise of his functions, act in accordance with such advice. Real executive power thus vests in Council of Ministers with Prime Minister as head. Council of Ministers is collectively responsible to the House of the People (Lok Sabha). Similarly, in states, Governor is head of executive, but it is the Council of Ministers with Chief Minister as head in whom real executive power vests. Council of Ministers of a state is collectively responsible to the Legislative Assembly.

The Constitution distributes legislative power between Parliament and state legislatures and provides for vesting of residual powers in Parliament. Power to amend the Constitution also vests in Parliament. The Constitution has provision for independence of judiciary, Comptroller and Auditor-General, Public Service Commissions and Chief Election Commissioner.

THE UNION AND ITS TERRITORY

India comprises 28 States and seven Union Territories. They are: Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal. Union Territories are : Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, National Capital Territory of Delhi, Lakshadweep and Pondicherry.

CITIZENSHIP

The Constitution of India provides for a single citizenship for the whole of India. Every person who was at the commencement of the Constitution (26 January 1950) domiciled in the territory of India and: (a) who was born in India; or (b) either of whose parents was born in India; or (c) who has been ordinarily resident in India for not less than five years became a citizen of India. The Citizenship Act, 1955, deals with matters relating to acquisition, determination and termination of Indian citizenship after the commencement of the Constitution.

FUNDAMENTAL RIGHTS

The Constitution offers all citizens, individually and collectively, some basic freedoms. These are guaranteed in the Constitution in the form of six broad categories of Fundamental Rights which are justiciable. Article 12 to 35 contained in Part III of the Constitution deal with Fundamental Rights. These are : (i) right to equality including equality before law, prohibition of discrimination on grounds of

religion, race, caste, sex or place of birth and equality of opportunity in matters of employment; (ii) right to freedom of speech and expression; assembly; association or union; movement; residence; and right to practice any profession or occupation (some of these rights are subject to security of the State, friendly relations with foreign countries, public order, decency or morality); (iii) right against exploitation, prohibiting all forms of forced labour, child labour and traffic in human beings; (iv) right to freedom of conscience and free profession, practice and propagation of religion; (v) right of any section of citizens to conserve their culture, language or script and right of minorities to establish and administer educational institutions of their choice; and (vi) right to constitutional remedies for enforcement of Fundamental Rights.

FUNDAMENTAL DUTIES

By the 42nd Amendment of the Constitution, adopted in 1976, Fundamental Duties of the citizens have also been enumerated. Article 51 'A' contained in Part IV A of the Constitution deals with Fundamental Duties. These enjoin upon a citizen among other things, to abide by the Constitution, to cherish and follow noble ideals which inspired India's struggle for freedom, to defend the country and render national service when called upon to do so and to promote harmony and spirit of common brotherhood transcending religious, linguistic and regional or sectional diversities.

DIRECTIVE PRINCIPLES OF STATE POLICY

The Constitution lays down certain Directive Principles of State Policy which though not justiciable, are 'fundamental in governance of the country' and it is the duty of the State to apply these principles in making laws. These lay down that the State shall strive to promote the welfare of people by securing and protecting as effectively as it may a social order in which justice—social, economic and political—shall form in all institutions of national life. The State shall direct its policy in such a manner as to secure the right of all men and women to an adequate means of livelihood, equal pay for equal work and within limits of its economic capacity and development, to make effective provision for securing the right to work, education and to public assistance in the event of unemployment, old age, sickness and disablement or other cases of undeserved want. The State shall also endeavour to secure to workers a living wage, humane conditions of work, a decent standard of life and full involvement of workers in management of industries.

In the economic sphere, the State is to direct its policy in such a manner as to secure distribution of ownership and control of material resources of community to subserve the common good and to ensure that operation of economic system does not result in concentration of wealth and means of production to common detriment.

Some of the other important directives relate to provision of opportunities and facilities for children to develop in a healthy manner, free and compulsory education for all children up to the age of 14; promotion of education and economic interests of scheduled castes, scheduled tribes and other weaker sections; organisation of village *panchayats*; separation of judiciary from executive, promulgation of a uniform civil code for whole country; protection of national monuments; promotion of justice on a basis of equal opportunity; provision of free legal aid; protection and improvement of environment and safeguarding of forests and wildlife of the country and promotion of international peace and security, just and honourable relations between nations, respect for international law, treaty obligations and settlement of international disputes by arbitration.

THE UNION

EXECUTIVE

The Union executive consists of the President, the Vice-President and the Council of Ministers with the Prime Minister as the head to aid and advise the President.

PRESIDENT

The President is elected by members of an electoral college consisting of elected members of both Houses of Parliament and Legislative Assemblies of the states in accordance with the system of proportional representation by means of single transferable vote. To secure uniformity among state *inter se* as well as parity between the states, as a whole, and the Union, suitable weightage is given to each vote. The President must be a citizen of India, not less than 35 years of age and qualified for election as member of the Lok Sabha. His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with procedure prescribed in Article 61 of the Constitution. He may, by writing under his hand addressed to the Vice-President, resign his office.

Executive power of the Union is vested in the President and is exercised by him either directly or through officers subordinate to him in accordance with the Constitution. Supreme command of defence forces of the Union also vests in him. The President summons, prorogues, addresses, sends messages to Parliament and dissolves the Lok Sabha; promulgates Ordinances at any time, except when both Houses of Parliament are in session; makes recommendations for introducing financial and money bills and gives assent to bills; grants pardons, reprieves, respites or remission of punishment or suspends, remits or commutes sentences in certain cases. When there is a failure of the constitutional machinery in a state, he can assume to himself all or any of the functions of the government of that state. The President can proclaim emergency in the country if he is satisfied that a grave emergency exists whereby security of India or any part of its territory is threatened whether by war or external aggression or armed rebellion.

VICE-PRESIDENT

The Vice-President is elected by members of an electoral college consisting of members of both Houses of Parliament in accordance with the system of proportional representation by means of single transferable vote. He must be a citizen of India, not less than 35 years of age and eligible for election as a member of the Rajya Sabha. His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with procedure prescribed in Article 67 b.

The Vice-President is *ex-officio* Chairman of the Rajya Sabha and acts as President when the latter is unable to discharge his functions due to absence, illness or any other cause or till the election of a new President (to be held within six months when a vacancy is caused by death, resignation or removal or otherwise of President). While so acting, he ceases to perform the function of the Chairman of the Rajya Sabha.

COUNCIL OF MINISTERS

There is a Council of Ministers headed by the Prime Minister to aid and advise the President in exercise of his functions. The Prime Minister is appointed by the President who also appoints other ministers on the advice of Prime Minister. The Council is collectively responsible to the Lok Sabha. It is the duty of the Prime

Minister to communicate to the President all decisions of Council of Ministers relating to administration of affairs of the Union and proposals for legislation and information relating to them.

The Council of Ministers comprises Ministers who are members of Cabinet, Ministers of State (independent charge), Ministers of State and Deputy Ministers.

LEGISLATURE

Legislature of the Union which is called Parliament , consists of President and two Houses, known as Council of States (Rajya Sabha) and House of the People (Lok Sabha). Each House has to meet within six months of its previous sitting. A joint sitting of two Houses can be held in certain cases.

RAJYA SABHA

The Constitution provides that the Rajya Sabha shall consist of 12 members to be nominated by the President from amongst persons having special knowledge or practical experience in respect of such matters as literature, science, art and social service; and not more than 238 representatives of the States and of the Union Territories.

Elections to the Rajya Sabha are indirect; members representing States are elected by elected members of legislative assemblies of the States in accordance with the system of proportional representation by means of the single transferable vote, and those representing Union Territories are chosen in such manner as Parliament may by law prescribe. The Rajya Sabha is not subject to dissolution; one-third of its members retire every second year.

Rajya Sabha, at present, has 245 seats. Of these, 233 members represent the States and the Union Territories and 12 members are nominated by the President. The names of members of Rajya Sabha and party affiliation are given in Appendices.

LOK SABHA

The Lok Sabha is composed of representatives of people chosen by direct election on the basis of adult suffrage. The maximum strength of the House envisaged by the Constitution is now 552 (530 members to represent the States, 20 members to represent the Union Territories and not more than two members of the Anglo-Indian community to be nominated by the President, if, in his opinion, that community is not adequately represented in the House). The total elective membership of the Lok Sabha is distributed among the States in such a way that the ratio between the number of seats allotted to each State and the population of the State is, as far as practicable, the same for all States. The Lok Sabha at present consists of 545 members. Of these, 530 members are directly elected from the States and 13 from Union Territories while two are nominated by the President to represent the Anglo-Indian community. Following the Constitution 84th Amendment Act, 2001 the total number of existing seats as allocated to various States in the Lok Sabha on the basis of the 1971 census shall remain unaltered till the first census to be taken after the year 2026.

The term of the Lok Sabha, unless dissolved earlier is five years from the date appointed for its first meeting. However, while a Proclamation of Emergency is in operation, this period may be extended by Parliament by law for a period not exceeding one year at a time and not extending in any case, beyond a period of six months after the Proclamation has ceased to operate. Fourteen Lok Sabhas have

been constituted so far. The term of each Lok Sabha and its Speaker(s) is given in table 3.1.

The State-wise allocation of seats in the two Houses and the party position in the Lok Sabha is given in table 3.2. The names of members of the Fourteenth Lok Sabha, their constituencies and party affiliations are given in Appendices.

QUALIFICATION FOR MEMBERSHIP OF PARLIAMENT

In order to be chosen a member of Parliament, a person must be a citizen of India and not less than 30 years of age in the case of Rajya Sabha and not less than 25 years of age in the case of Lok Sabha. Additional qualifications may be prescribed by Parliament by law.

FUNCTIONS AND POWERS OF PARLIAMENT

As in other parliamentary democracies, the Parliament in India has the cardinal functions of legislation, overseeing of administration, passing of the Budget, ventilation of public grievances and discussing various subjects like development plans, national policies and international relations. The distribution of powers between the Union and the States, followed in the Constitution, emphasises in many ways the general predominance of Parliament in the legislative field. Apart from a wide-range of subjects, even in normal times, the Parliament can, under certain circumstances, assume legislative power with respect to a subject falling within the sphere exclusively reserved for the States. The Parliament is also vested with powers to impeach the President and to remove the Judges of Supreme Court and High Courts, the Chief Election Commissioner and the Comptroller and Auditor General in accordance with the procedure laid down in the Constitution.

All legislation require consent of both the Houses of Parliament. In the case of money bills, however, the will of the Lok Sabha prevails. Delegated legislation is also subject to review and control by Parliament. Besides the power to legislate, the Constitution vests in Parliament the power to initiate amendment of the Constitution.

PARLIAMENTARY COMMITTEES

The functions of Parliament are not only varied in nature, but considerable in volume. The time at its disposal is limited. It cannot make very detailed scrutiny of all legislative and other matters that come up before it. A good deal of Parliamentary business is, therefore, transacted in the committees.

Both Houses of Parliament have a similar committee structure, with a few exceptions. Their appointment, terms of office, functions and procedure of conducting business are also more or less similar and are regulated as per rules made by the two Houses under Article 118(1) of the Constitution.

Broadly, Parliamentary Committees are of two kinds—Standing Committees and *ad hoc* Committees. The former are elected or appointed every year or periodically and their work goes on, more or less, on a continuous basis. The latter are appointed on an *ad hoc* basis as need arises and they cease to exist as soon as they complete the task assigned to them.

Standing Committees : Among the Standing Committees, the three Financial Committees—*Committees on Estimates, Public Accounts* and *Public Undertakings*—constitute a distinct group as they keep an unremitting vigil over Government expenditure and performance. While members of the Rajya Sabha are associated

with Committees on Public Accounts and Public Undertakings, the members of the Committee on Estimates are drawn entirely from the Lok Sabha.

The *Estimates Committee* reports on 'what economies, improvements in organisation, efficiency or administrative reform consistent with policy underlying the estimates' may be effected. It also examines whether the money is well laid out within limits of the policy implied in the estimates and suggests the form in which estimates shall be presented to Parliament. The *Public Accounts Committee* scrutinises appropriation and finance accounts of Government and reports of the Comptroller and Auditor-General. It ensures that public money is spent in accordance with Parliament's decision and calls attention to cases of waste, extravagance, loss or nugatory expenditure. *The Committee on Public Undertakings* examines reports of the Comptroller and Auditor-General, if any. It also examines whether public undertakings are being run efficiently and managed in accordance with sound business principles and prudent commercial practices.

Besides these three Financial Committees, the Rules Committee of the Lok Sabha recommended setting-up of *17 Department Related Standing Committees* (DRSCs). Accordingly, 17 Department Related Standing Committees were set up on 8 April 1993. In July 2004, rules were amended to provide for the constitution of seven more such committees, thus raising the number of DRSCs from 17 to 24. The functions of these Committees are : (a) to consider the Demands for Grants of various Ministries/Departments of Government of India and make reports to the Houses; (b) to examine such Bills as are referred to the Committee by the Chairman, Rajya Sabha or the Speaker, Lok Sabha, as the case may be, and make reports thereon; (c) to consider Annual Reports of ministries/departments and make reports thereon; and (d) to consider policy documents presented to the Houses, if referred to the Committee by the Chairman, Rajya Sabha or the Speaker, Lok Sabha, as the case may be, and make reports thereon.

Other Standing Committees in each House, divided in terms of their functions, are (i) Committees to Inquire: (a) *Committee on Petitions* examines petitions on bills and on matters of general public interest and also entertains representations on matters concerning subjects in the Union List; and (b) *Committee of Privileges* examines any question of privilege referred to it by the House or Speaker/Chairman; (ii) Committees to Scrutinise : (a) *Committee on Government Assurances* keeps track of all the assurances, promises, undertakings, etc., given by Ministers in the House and pursues them till they are implemented; (b) *Committee on Subordinate Legislation* scrutinises and reports to the House whether the power to make regulations, rules, sub-rules, bye-laws, etc., conferred by the Constitution or Statutes is being properly exercised by the delegated authorities; and (c) *Committee on Papers Laid on the Table* examines all papers laid on the table of the House by Ministers, other than statutory notifications and orders which come within the purview of the Committee on Subordinate Legislation, to see whether there has been compliance with the provisions of the Constitution, Act, rule or regulation under which the paper has been laid; (iii) Committees relating to the day-to-day business of the House: (a) *Business Advisory Committee* recommends allocation of time for items of Government and other business to be brought before the Houses; (b) *Committee on Private Members' Bills and Resolutions of the Lok Sabha* classifies and allocates time to Bills introduced by private members, recommends allocation of time for discussion on private members' resolutions and examines Constitution amendment bills before their introduction by private members in the Lok Sabha. The Rajya Sabha

does not have such a committee. It is the Business Advisory Committee of that House which recommends allocation of time for discussion on stage or stages of private members' bills and resolutions; (c) *Rules Committee* considers matters of procedure and conduct of business in the House and recommends amendments or additions to the Rules; and (d) *Committee on Absence of Members from the Sittings of the House of the Lok Sabha* considers all applications from members for leave or absence from sittings of the House. There is no such Committee in the Rajya Sabha. Applications from members for leave or absence are considered by the House itself; (iv) *Committee on the Welfare of Scheduled Castes and Scheduled Tribes,* on which members from both Houses serve, considers all matters relating to the welfare of Scheduled Castes and Scheduled Tribes which come within the purview of the Union Government and keeps a watch whether constitutional safeguards in respect of these classes are properly implemented; (v) Committees concerned with the provision of facilities to members : (a) *General Purposes Committee* considers and advises Speaker/Chairman on matters concerning affairs of the House, which do not appropriately fall within the purview of any other Parliamentary Committee; and (b) *House Committee* deals with residential accommodation and other amenities for members; (vi) *Joint Committee on Salaries and Allowances of Members of Parliament*, constituted under the Salary, Allowances and Pension of Members of Parliament Act, 1954, apart from framing rules for regulating payment of salary, allowances and pension to Members of Parliament, also frames rules in respect of amenities like medical, housing, telephone, postal, constituency and secretarial facility; (vii) *Joint Committee on Offices of Profit* examines the composition and character of committees and other bodies appointed by the Central and State governments and Union Territories Administrations and recommends what offices ought to or ought not to disqualify a person from being chosen as a member of either House of Parliament; (viii) *The Library Committee* consisting of members from both Houses, considers matters concerning the Library of Parliament; (ix) On 29 April 1997, a *Committee on Empowerment of Women* with members from both the Houses was constituted with a view to securing, among other things, status, dignity and equality for women in all fields; (x) On 4 March 1997, the *Ethics Committee* of the Rajya Sabha was constituted. The Ethics Committee of the Lok Sabha was constituted on 16 May 2000.

Ad hoc Committees : Such Committees may be broadly classified under two heads : (a) committees which are constituted from time to time, either by the two Houses on a motion adopted in that behalf or by Speaker/Chairman to inquire into and report on specific subjects, *(e.g., Committees on the Conduct of certain Members during President's Address, Committees on Draft Five-Year Plans, Railway Convention Committee, Committee on Members of Parliament Local Area Development Scheme, Joint Committee on Bofors Contracts, Joint Committee on Fertilizer Pricing, Joint Committee to enquire into irregularities in securities and banking transactions, Joint Committee on Stock Market Scam, Joint Committees on Security in Parliament Complex, Committee on Provision of Computers for Members of Parliament, Offices of Political Parties and Officers of the Lok Sabha Secretariat; Committee on Food Management in Parliament House Complex; Committee on Installation of Portraits/Statues of National Leaders and Parliamentarians in Parliament House Complex, etc.), and (b) Select or Joint Committees on Bills* which are appointed to consider and report on a particular Bill. These Committees are distinguishable from the other *ad hoc* committees inasmuch as they are concerned

with Bills and the procedure to be followed by them as laid down in the Rules of Procedure and Directions by the Speaker/Chairman.

LEADERS OF OPPOSITION IN PARLIAMENT

In keeping with their important role, the Leaders of Opposition in the Rajya Sabha and the Lok Sabha are accorded statutory recognition. Salary and other suitable facilities are extended to them through a separate legislation brought into force on 1 November 1977.

GOVERNMENT BUSINESS IN PARLIAMENT

The Minister of Parliamentary Affairs is entrusted with the responsibility of coordinating, planning and arranging Government Business in both Houses of Parliament. In the discharge of this function, he is assisted by his Ministers of State. The Minister also keeps close and constant contact with the presiding officers, the leaders as well as chief whips and whips of various parties and groups in both the Houses of Parliament. During the period 1 June 2006 to 31 May 2007, both Houses of Parliament passed 57 Bills.

CONSULTATIVE COMMITTEES

The Ministry of Parliamentary Affairs constitutes Consultative Committees of Members of both the Houses of Parliament, which are attached to various Ministries, and arranges meetings thereof. The Minister/Minister of State in-charge of the Ministry concerned acts as the chairman of the Consultative Committee of that Ministry.

The main purpose of these Committees is to provide a forum for informal discussions between the Government and Members of Parliament on policies and programmes of the Government and the manner of their implementation. Meetings of these Committees are held both during the session and inter-session period of Parliament. After the constitution of the 14th Lok Sabha, 32 Consultative Committees attached to various Ministries were constituted. Besides this, 16 Informal Consultative Committees of the sixteen Railway Zones have also been constituted. Unlike the Consultative Committees attached to the Ministries, meetings, of these Informal Consultative Committees are to be arranged during Session periods only.

322 meetings of the Consultative Committees were held till 31 May 2007 after the constitution of the 14th Lok Sabha including 116 meetings held during the year 2006.

NOMINATION OF MEMBERS OF PARLIAMENT ON GOVERNMENT COMMITTEES/BODIES

The Minister of Parliamentary Affairs nominates Members of Parliament on Committees, Councils, Boards and Commissions, etc., set-up by the Government of India in various Ministries (except in case of statutory or other bodies where the statute or the bye-laws framed thereunder provides that the Member of Parliament to be appointed thereon will be nominated by the Presiding Officers of the respective Houses or will be elected by the Lok Sabha or the Rajya Sabha, as the case may be). The Members are nominated on such Bodies keeping in view their aptitude and special interest in the subject.

YOUTH PARLIAMENT COMPETITION

In order to develop democratic ethos in the younger generation the Ministry conducts youth parliament Competition in various categories of schools and colleges/

universities. The youth parliament Scheme was first introduced in the Schools in Delhi in 1966-67. Kendriya Vidyalayas located in and around Delhi were incorporated into the ongoing Scheme for Delhi Schools in 1978. Subsequently, as separate scheme of youth parliament for Kendriya Vidyalayas at the National Level was launched in 1988. Similarly, in 1997-98, two new youth Parliament Schemes at the national level, one for Jawahar Navodaya Vidyalayas and the other for Universities/Colleges were launched.

During 2006-07, the 41st Youth Parliament Competition for Delhi Schools was completed and 46 schools participated. The 19th National Youth Parliament Competition for Kendriya Vidyalayas was held and 90 Kendriya Vidyalayas participated. The 10th National Youth Parliament Competition for Jawahar Navodaya Vidyalayas is in progress. The Eighth National Youth Parliament Competition for Universities/Colleges is also in progress.

OTHER PARLIAMENTARY MATTERS

ALL INDIA WHIPS CONFERENCE

The Ministry of Parliamentary Affairs, Government of India has been organising All India Whips' Conference from time to time, with the purpose of establishing suitable links among the whips of various political parties at the Centre and the States who are concerned with the practical working of the legislatures to discuss matters of common interest and to evolve high standards to strengthen the institution of Parliamentary Democracy.

MATTERS UNDER RULE 377 AND SPECIAL MENTIONS

The Ministry of Parliamentary Affairs takes follow-up action on matters raised under Rule 377 of the Rules of Procedure and Conduct of Business in Lok Sabha and by way of Special Mentions in Rajya Sabha. Also after 'Question Hour' in both the Houses of Parliament, Members raise matters of urgent public importance. Though it is not mandatory, Ministers sometimes react to the points made by the Members. In the absence of concerned Minister the Minister of Parliamentary Affairs assures the House or the individual Members that their sentiments would be conveyed to the concerned Ministers.

IMPLEMENTATION OF ASSURANCES

The Ministry culls out assurances, promises, undertakings, etc., given by Ministers in both the Houses of Parliament, from the daily proceedings and forwards them to the concerned Ministries/Departments for implementation, Statements showing action taken by the Government in implementation of the assurances, after due scrutiny of the implementation of the assurances, after due scrutiny of the implementation reports received from the various Ministries/Departments concerned, are laid periodically on the table of the Houses by Minister/Minister of State for Parliamentary Affairs.

ADMINISTRATIVE SET-UP

The Government of India (Allocation of Business) Rules, 1961 are made by the President of India under Article 77 of the Constitution for the allocation of business of the Government of India. The Ministries/Departments of the Government are created by the President on the advice of the Prime Minister under these Rules. The

business of the Government are transacted in the Ministries/Departments, Secretariats and offices (referred to as 'Department') as per the distribution of subjects specified in these Rules. Each of the Ministry(ies) is assigned to a Minister by the President on the advice of the Prime Minister. Each department is generally under the charge of a Secretary to assist the Minister on policy matters and general administration.

CABINET SECRETARIAT

The Cabinet Secretariat is under the direct charge of the Prime Minister. The administrative head of the Secretariat is the Cabinet Secretary who is also the ex-officio Chairman of the Civil Services Board.

In the Government of India (Allocation of Business) Rules, 1961 'Cabinet Secretariat' finds a place in the First Schedule to the Rules. The subjects allotted to this Secretariat are : (i) Secretarial assistance to Cabinet and Cabinet Committees; and (ii) Rules of Business.

The Cabinet Secretariat is responsible for the administration of the Government of India (Transaction of Business) Rules, 1961 and the Government of India (Allocation of Business) Rules 1961, facilitating smooth transaction of business in Ministries/Departments of the Government by ensuring adherence to these rules. The Secretariat assists in decision-making in Government by ensuring Inter-Ministerial coordination, ironing out differences amongst Ministries/Departments and evolving consensus through the instrumentality of the standing and *ad hoc* Committees of Secretaries. Through this mechanism, new policy initiatives are also promoted.

The Cabinet Secretariat ensures that the President, the Vice-President and Ministers are kept informed of the major activities of all Ministries/Departments by means of monthly summary of their activities. Management of major crisis situations in the country and coordinating activities of various Ministries in such a situation is also one of the functions of the Cabinet Secretariat.

The Cabinet Secretariat is seen as a useful mechanism by the departments for promoting inter-Ministerial coordination since the Cabinet Secretary is also the head of the civil services. The Secretaries felt it necessary to keep the Cabinet Secretary informed of developments from time to time. The Transaction of Business Rules also require them to keep the Cabinet Secretary informed specially if there are any departures from these rules.

NATIONAL AUTHORITY, CHEMICAL WEAPONS CONVENTION

National Authority, Chemical Weapons Convention (CWC) was set up by a resolution of Cabinet Secretariat dated 5 May 1997 to fulfil the obligations enunciated in the Chemical Weapons Convention initially signed by 130 countries in a conference which concluded on 14 January 1993 for the purpose prohibiting of the development, production, execution, transfer, use and stockpiling of all chemical weapons by Member-States is a non-discriminatory process. To fulfil its obligations, each State Party has to designate or establish a National Authority to serve as the national focal point for effective liaison with Organisation for Prohibition of the Chemical Weapons (OPCW) and other State Parties and hence the NA, CWC under the administrative control of the Cabinet Secretariat was set-up.

A high-level steering committee under the Chairmanship of the Cabinet Secretary with Secretary (Chemical and Petrochemicals), Foreign Secretary, Secretary,

Defence Research and Development, Defence Secretary and Chairman, National Authority as its other members would oversee the functions of the National Authority. The NA, CWC is responsible for implementation of CWC Act, liaison with CWC and other State Parties, Collection of data fulfilling of declaration obligations, negotiating facility agreements, coordinating OPCW inspections, providing appropriate facilities for training national inspectors and industry personnel, ensuring protection of confidential business information, checking declarations for consistency, accuracy and completeness, registration of entitles engaged in activities related to CWC, etc.

MINISTRIES/DEPARTMENTS OF THE GOVERNMENT

The Government consists of a number of Ministries/Departments, number and character varying from time to time on factors such as volume of work importance attached to certain items, changes of orientation, political expediency, etc. On 15 August 1947, the number of Ministries at the Centre was 18.

LIST OF THE MINISTRIES/DEPARTMENTS (as on 30.9.2006)

1. Ministry of Agriculture *(Krishi Mantralaya)*

- (i) Department of Agriculture and Cooperation *(Krishi aur Sahkarita Vibhag)*
- (ii) Department of Agricultural Research and Education *(Krishi Anusandhan aur Shiksha Vibhag)*
- (iii) Department of Animal Husbandry, Dairying and fishiries *(Pashupalan, Dairy aur Matsyapalan Vibhag)*

2. Ministry of Chemicals and Fertilizers *(Rasayan aur Urvarak Mantralaya)*

- (i) Department of Chemicals and Petro-Chemicals *(Rasayan aur Petro-Rasayan Vibhag)*
- (ii) Department of Fertilizers *(Urvarak Vibhag)*

3. Ministry of Civil Aviation *(Nagar Vimanan Mantralaya)*

4. Ministry of Coal *(Koyala Mantralaya)*

5. Ministry of Commerce and Industry *(Vanijya aur Udyog Mantralaya)*

- (i) Department of Commerce *(Vanijya Vibhag)*
- (ii) Department of Industrial Policy and Promotion (*Audyogik Niti aur Samvardhan Vibhag)*

6. Ministry of Communications and Information Technology *(Sanchar aur Soochana Praudyogiki Mantralaya)*

- (i) Department of Telecommunications *(Doorsanchar Vibhag)*
- (ii) Department of Post *(Dak Vibhag)*
- (iii) Department of Information Technology *(Soochana Praudyogiki Vibhag)*

7. Ministry of Consumer Affairs, Food and Public Distribution *(Upbhokta Mamle, Khadya aur Sarvajanik Vitaran Mantralaya)*

- (i) Department of Consumer Affairs *(Upbhokta Mamle Vibhag)*
- (ii) Department of Food and Public Distribution *(Khadya aur Sarvajanik Vitaran Vibhag)*

8. **Ministry of Corporate Affaire *(Korporate Karya Mantralya)***
9. **Ministry of Culture *(Sanskriti Mantralya)***
10. **Ministry of Defence *(Raksha Mantralaya)***
    (i) Department of Defence *(Raksha Vibhag)*
    (ii) Department of Defence Production and Supplies *(Raksha Utpadan aur Aapoorti Vibhag)*
    (iii) Department of Defence Research and Development *(Raksha Anusandhan aur Vikas Vibhag)*
11. **Ministry of Development of North-Eastern Region *(Uttar Poorvi Kshetra Vikas Mantralaya)***
12. **Ministry of Earth Sciences *(Bhoo Vigyan Mantralaya)***
13. **Ministry of Environment and Forests *(Paryavaran aur Van Mantralaya)***
14. **Ministry of External Affairs *(Videsh Mantralaya)***
15. **Ministry of Finance *(Vitta Mantralaya)***
    (i) Department of Economic Affairs *(Arthik Karya Vibhag)*
    (ii) Department of Expenditure *(Vyaya Vibhag)*
    (iii) Department of Revenue *(Rajaswa Vibhag)*
    (iv) Department of Disinvestment *(Vinivesh Vibhag)*
    (v) Department of Financial Services *(Vittiya Sewayen Vibhag)*
16. **Ministry of Food Processing Industries *(Khadya Prasanskaran Udyog Mantralaya)***
17. **Ministry of Health and Family Welfare *(Swasthya aur Parivar Kalyan Mantralaya)***
    (i) Department of Health and family welfare *(Swasthya aur Parivar Kalyan Mantralaya)*
    (ii) Department of Ayurveda, Yoga-Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) *(Ayurveda, Yoga-Prakritik Chikitsa Paddhati, Unani, Siddha aur Homoeopathy Vibhag)*
18. **Ministry of Heavy Industries and Public Enterprises *(Bhari Udyog aur Lok Udyam Mantralaya)***
    (i) Department of Heavy Industries *(Bhari Udyog Vibhag)*
    (ii) Department of Public Enterprises *(Lok Udyam Vibhag)*
19. **Ministry of Home Affairs *(Grih Mantralaya)***
    (i) Department of Internal Security *(Antarik Suraksha Vibhag)*
    (ii) Department of States *(Rajya Vibhag)*
    (iii) Department of Official Language *(Raj Bhasha Vibhag)*
    (iv) Department of Home *(Grih Vibhag)*
    (v) Department of Jammu and Kashmir Affairs *(Jammu tatha Kashmir Vibhag)*
    (vi) Department of Border Management *(Seema Prabandhan Vibhag)*

20. Ministry of Housing and Urban Poverty Alleviation *(Aawas aur Shahari Garibi Upshaman Mantralaya)*

21. Ministry of Human Resource Development *(Manav Sansadhan Vikas Mantralaya)*

(i) Department of School Education and Literacy *(School Shiksha aur Saksharta Vibhag)*

(ii) Department of Higher Education *(Uchchatar Shiksha Vibhag)*

22. Ministry of Information and Broadcasting *(Soochana aur Prasaran Mantralaya)*

23. Ministry of Labour and Employment (*Shram aur Rozgar Mantralaya*)

24. Ministry of Law and Justice *(Vidhi aur Nyaya Mantralaya)*

(i) Department of Legal Affairs *(Vidhi Karya Vibhag)*

(ii) Legislative Department *(Vidhayee Vibhag)*

(iii) Department of Justice *(Nyaya Vibhag)*

25. Ministry of Mines (*Khan Mantralaya*)

26. Ministry of Minority Affairs *(Alpasankhyak Karya Mantralya)*

27. Ministry of New and Renewable Energy *(Naveen Aur Navikarniya Oorja Mantralaya)*

28. Ministry of Overseas Indians Affairs *(Apravasi Bharatiyon Ke Mamalon Ka Mantralya)*

29. Ministry of Panchayati Raj *(Panchayati Raj Mantralaya)*

30. Ministry of Parliamentary Affairs *(Sansadiya Karya Mantralaya)*

31. Ministry of Personnel, Public Grievances and Pensions *(Karmik Lok Shikayat tatha Pension Mantralaya)*

(i) Department of Personnel and Training *(Karmik aur Prashikshan Vibhag)*

(ii) Department of Administrative Reforms and Public Grievances *(Prashasanik Sudhar aur Lok Shikayat Vibhag)*

(iii) Department of Pensions and Pensioners' Welfare *(Pension aur Pension Bhogi Kalyan Vibhag)*

32. Ministry of Petroleum and Natural Gas *(Petroleum aur Prakritik Gas Mantralaya)*

33. Ministry of Planning *(Yojana Mantralaya)*

34. Ministry of Power *(Oorja Mantralaya)*

35. Ministry of Railways *(Rail Mantralaya)*

36. Ministry of Shipping, Road Transport and Highways *(Pot Parivahan, Sarak Parivahan aur Raj Marg Mantralaya)*

(i) Department of Shipping *(Pot Parivahan Vibhag)*

(ii) Department of Road Transport and Highways *(Sadak Parivahan Aur Raj Marg Vibhag)*

37. Ministry of Rural Development *(Gramin Vikas Mantralaya)*

(i) Department of Rural Development
(Gramin Vikas Vibhag)

(ii) Department of Land Resources
(Bhumi Sansadhan Vibhag)

(iii) Department of Drinking Water Supply
(Peya Jal Poorti Vibhag)

38. Ministry of Science and Technology *(Vigyan aur Praudyogiki Mantralaya)*

(i) Department of Science and Technology
(Vigyan aur Praudyogiki Vibhag)

(ii) Department of Scientific and Industrial Research
(Vigyan aur Audyogik Anusandhan Vibhag)

(iii) Department of Bio-Technology *(Biotechnology Vibhag)*

39. Ministry of Micro, Small and Medium Enterprises *(Sukshma Laghu Aur Madhyam Udyam Mantralya)*

40. Ministry of Social Justice and Empowerment *(Samajik Nyaya aur Adhikarita Mantralaya)*

41. Ministry of Statistics and Programme Implementation *(Sankhyiki aur Karyakram Kiryanvayan Mantralaya)*

42. Ministry of Steel *(Ispat Mantralaya)*

43. Ministry of Textiles *(Vastra Mantralaya)*

44. Ministry of Tourism *(Paryatan Mantralaya)*

45. Ministry of Tribal Affairs *(Janjatiya Karya Mantralaya)*

46. Ministry of Urban Development *(Shahari Vikas Mantralaya)*

47. Ministry of Water Resources *(Jal Sansadhan Mantralaya)*

48. Ministry of Woman and Child Development *(Mahila Aur Bal Vikas Mantralaya)*

49. Ministry of Youth Affairs and Sports *(Yuva Karyakram aur Khel Mantralaya)*

50. Department of Atomic Energy *(Parmanu Oorja Vibhag)*

51. Department of Space *(Antariksh Vibhag)*

52. Cabinet Secretariat *(Mantrimandal Sachivalaya)*

53. President's Secretariat *(Rashtrapati Sachivalaya)*

54. Prime Minister's Office *(Pradhan Mantri Karyalaya)*

55. Planning Commission *(Yojana Ayog)*

PUBLIC SERVICES

ALL INDIA SERVICES

Prior to Independence, the Indian Civil Service (ICS) was the senior most amongst the Services of the Crown in India. Besides the ICS, there was also the Indian Police Service. After Independence, it was felt that though the ICS was a legacy of the imperial period there was need for the All India Services for maintaining the unity, integrity and stability of the nation. Accordingly, a provision was made in Article 312 of the Constitution for creation of one or more All India Services common to the

Union and State. The Indian Administrative Service and the Indian Police Service are deemed to be constituted by the Parliament in terms of Article 312 of the Constitution. After the promulgation of the Constitution, a new All India Service, namely, the Indian Forest Service, was created in 1966. A common unique feature of the All India Services is that the members of these services are recuited by the Centre but their services are placed under various State cadres and they have the liability to serve both under the State and under the Centre. This aspect of the All India Services strengthens the unitary character of the Indian federation.

Of the three All India Services, namely, the Indian Administrative Service (IAS), the Indian Police Service (IPS) and the Indian Forest Service (IFS), the Ministry of Personnel, Public Grievances and Pension is the cadre controlling authority for the IAS. The recruitment to all the three services is made by the UPSC. These officers are recruited and trained by the Central Government and then allotted to different State cadres.

CENTRAL SECRETARIAT SERVICES

The Central Secretariat has three services, namely, (i) Central Secretariat Service (CSS), (ii) Central Secretariat Stenographers' Service (CSSS) and (iii) the Central Secretariat Clerical Service (CSCS). The grades of Selection Grade and Grade I of CSS and as well as the Senior Principal Private Secretary and Principal Private Secretary of CSSS are centralised. The Section Officers Grade and Assistants Grade of the CSS, Steno Grade 'D', 'C', 'A' and 'B' (merged) of CSS and LDS & UDC are decentralised. The grade-wise cadre strength of these services as on 30 June, 2007 was as under:

Service	CSS	CSSS	CSCS			
	Grade	No. of posts	Grade	No. of posts	Grade	No. of posts
1.	Sr. Selection Grade (Group 'A' Gazettted)	110	-	-	-	-
2.	Selection Grade (Group 'A' Gazetted)	330	Sr. PPS Group "A" Gazetted	68	-	-
3.	Grade-I (Group 'A' Gazetted)	1405	PPS Group 'A' Gazetted	182	-	-
4.	Section Officer (Group 'B' Gazetted)	3000	PS (A&B) (Group 'B' Gazetted)	1598	-	-
5.	Assistant (Group 'B' Non-Gazetted)	4905	Grade "C"/ PA (Group 'B' Non-Gazetted)	2793		
6.	-		Grade 'D' Grade 'C' Non-Gazetted	1958	UDC/LDC Group 'C' Non-Gazetted	9115
Total	-	9750	-	6599	-	9115

Appointments and promotions in the Centralised Grades are made on all secretariat basis by Department of Personnel and Training (DOP&T). In respect of the decentralised grades, DOP&T monitors and assesses the overall requirements of different cadres for fixing zones of promotion against the vacancies in seniority quota and arranges centralised requirement against direct recruitment and departments examinations quota vacancies through open competitive and departmental examinations.

Pursuant to the recommendations of the Parliamentary Standing Committee on Home Affairs, the Government set-up a Committee on the Cadre Restructuring of CSS in February 2001. The committee submitted its Report in February 2002 and made several recommendations. The Government after careful considerations has taken several decisions in October 2003 for improving the career prospects of the CSS personnel and many of these recommendations have either been implemented, or are in various stages of implementation.

The Government had also constituted a 'Group of Officers' on Cadre Structure of the Central Secretariat Stenographers' Service (CSSS), which submitted its Report in February 2004. After considering the recommendations of the Group of Officers, the Government has taken several decisions on Cadre Structure of CSSS, for improving the career prospects of the CSSS personnel. Necessary executive orders for operationalisation of almost all the decisions have been issued.

UNION PUBLIC SERVICE COMMISSION

The Constitution provides for an independent body known as Union Public Service Commission (UPSC) for recruitment to Group 'A' and Group 'B' Gazetted posts under Central Government and for advice in various service matters. The Chairman and members of the Commission are appointed by the President for a tenure of six years or till they attain the age of 65 years, whichever is earlier. To ensure independence, members who were at the service of Government at the time of appointment are deemed to have retired from Government service on their appointment in the Commission. The Chairman and members are also not eligible for further employment under the Government. They cannot be removed except for the reasons and in the manner provided for in the Constitution.

STAFF SELECTION COMMISSION

Staff Selection Commission (SSC) initially known as Subordinate Service Commission was set up on 1 July 1976. It has been entrusted with the work of making recruitment to (i) all non-gezetted Group 'B' posts in the various Ministries/ Departments of the Government and their Attached and Subordinate Offices which are in the pay scales of Rs 6,500-10,500 and (ii) all non-technical Group 'C' posts in the various Ministries/Departments of the Government and their attached and subordinate offices, except those posts which are specifically exempted from the purview of the Staff Selection Commission. The Commission is an attached office of the Department of Personnel and Training and comprises of a Chairman, two Members and Secretary-cum-Controller of Examinations. The tenure of Chairman/ Members is for five years or till they attain the age of 62 years, whichever is earlier. The Commission's headquarters and the office of its Northern Region are in New Delhi. The offices of Central, Western, Eastern, North-Eastern, Southern and Karnataka-Kerala region are at Allahabad, Mumbai, Kolkata, Guwahati, Chennai and Bangalore respectively. Its sub-regional offices of Madhya Pradesh-Chhattisgarh region and North-Western region are at Raipur and Chandigarh respectively.

OFFICIAL LANGUAGE—CONSTITUTIONAL/STATUTORY PROVISIONS

Article 343 (1) of the Constitution provides that Hindi in Devanagari script shall be the Official Language of the Union. Article 343(2) also provided for continuing the use of English in official work of the Union for a period of 15 years (i.e., up to 25 January 1965) from the date of commencement of the Constitution. Article 343(3) empowered the Parliament to provide by law for continued use of English for official purposes even after 25 January 1965. Accordingly, section 3(2) of the Official Languages Act, 1963 (amended in 1967) provides for continuing the use of English in official work even after 25 January 1965. The Act also lays down that both Hindi and English shall compulsorily be used for certain specified purposes such as Resolutions, General Orders, Rules, Notifications, Administrative and other Reports, Press Communiqués; Administrative and other Reports and Official Papers to be laid before a House or the Houses of Parliament; Contracts, Agreements, Licences, Permits, Tender Notices and Forms of Tender, etc.

In 1976, Official Language Rules were framed under the provisions of section 3(4) of the Official Languages Act, 1963. Its salient features are as under: (i) These Rules apply to all Central Government Offices, including any office of a Commission, Committee or Tribunal appointed by the Central Government and Corporation or Company owned or controlled by it. (ii) Communications from a Central Government Office to State/Union Territories or to any person in Region "A" comprising the States of Uttar Pradesh, Uttarakhand, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Rajasthan, Haryana and Union Territories of Andaman and Nicobar Islands and Delhi, shall be in Hindi. (iii) Communications from a Central Government Office to States/Union Territories in Region "B" comprising the States of Punjab, Gujarat, Maharashtra and the Union Territory of Chandigarh, shall ordinarily be in Hindi. However if any communication to any person in Region "B" is issued in English it shall be accompanied by a Hindi Translation thereof. (iv) Communications from a Central Government Office to a State Government Office in region 'C', comprising all other States and Union Territories not included in region 'A' and 'B', or to any office (not being a Central Government Office) or person shall be in English. (v) Communications between Central Government offices and from Central Government Offices to the Offices of the State Governments/ Union Territories and individuals, etc., will be in Hindi in such proportions as may be determined from time to time. (vi) All Manuals, Codes and other Procedural literature relating to Central Government Offices are required to be prepared both in Hindi and English. All Forms, Headings of Registers, Name Plates, Notice Boards and various items of stationery, etc., are also required to be in Hindi and English. (vii) It shall be the responsibility of the officer signing the documents specified in section 3(3) of the Act to ensure that these are issued both in Hindi and English. (viii) Shall be the responsibility of the administrative head of each Central Government Office to ensure that the provisions of the Act, the Rules and directions issued under Sub-Rule-(2) are properly complied with and to devise suitable and effective check points for this purpose.

POLICY

In compliance with the Official Language Resolution, 1968, an Annual Programme is prepared by the Department of Official Language in which targets are set for the offices of the Central Government with regard to originating correspondence,

telegrams, telex, etc., in Hindi. A Quarterly Progress Report is called for from the offices of the Central Government regarding achievements vis-à-vis the said targets. An Annual Assessment Report is prepared on the basis of the Quarterly Progress Reports, which is laid on the Tables of both Houses of the Parliament and copies endorsed to State Governments and the Ministries/Departments of the Central Government.

Eight Regional Implementation Offices have been established at Bangalore, Cochin, Mumbai, Kolkata, Guwahati, Bhopal, Delhi and Ghaziabad to monitor the implementation of Official Language Policy of the Union.

COMMITTEES/SAMITIS

A Committee of Parliament on Official Language was constituted in 1976 under section 4 of the Official Languages Act, 1963 to periodically review the progress in the use of Hindi as the Official Language of the Union and to submit a report to the President. The Committee consists of 20 Members of the Lok Sabha and 10 of the Rajya Sabha. The Committee have decided to submit its report in parts. It has so far submitted to the President eight parts of its report. The Presidential Orders on seven parts of its report have been issued and work is in progress on the eighth part.

The Kendriya Hindi Samiti was constituted in the year 1967. It is chaired by the Prime Minister. It is the apex policy making body which lays down the guidelines for the propagation and progressive use of Hindi as Official Language of the Union.

Under the directions of the Kendriya Hindi Samiti, Hindi Salahakar Samitis have been constituted in all Ministries/Departments under the chairmanship of the Ministers concerned. These Samitis periodically review the progress in the use of Hindi in their respective Ministries/Departments and the offices/ undertakings and suggest measures to promote the use of Hindi.

Besides, the Central Official Language Implementation Committee [headed by Secretary, Department of Official Language and consisting of Joint Secretaries (In-charge Official Language) of all the Ministries/Departments as ex-officio members] reviews the status of use of Hindi for official purposes of the Union, training of its employees in Hindi and implementation of instructions issued from time to time by the Department of Official Language and suggests measure for removing the shortcomings and difficulties noticed in implementing these instructions.

Town Official Language Implementation Committees are constituted in different towns having ten or more Central Government offices, etc., to review the progress made in the use of Hindi in their member offices and exchange experiences. So far 257 Town Official Language Implementation Committees have been constituted all over the country.

AWARD SCHEMES

The Indira Gandhi Rajbhasha Awards Scheme has been in operation since 1986-87. Shields are given every year to Ministries/ Departments, Banks and Financial Institutions, Public Sector Undertakings and Town Official Language Implementation Committees for outstanding achievements in the implementation of the Official Language Implementation Cmmittees for outstanding achievements in the implementation of the Official Language Policy of the Union. Cash awards are given to the working/retired employees of the Central Government, Banks,

Financial Institutions, Universities, Training Institutions and Autonomous Bodies of the Central Government for writing original books in Hindi.

The National Awards Scheme for Original Book writing on Gyan-Vigyan has been renamed as Rajiv Gandhi National Awards Scheme for Original Book Writing in Hindi for promoting writing of books in Hindi on all branches of modern Science/ Technology and contemporary subjects. This Scheme is open to all citizens of India.

At Regional level, Regional Official Language Awards are given each year to the Regional/Subordinate Offices, Public Sector Undertakings, Town Official Language Implementation Committees, Banks and Financial Institutions of the Central Government for outstanding achievements in implementing the Official Language Policy of the Union and accelerating the progressive use of Hindi.

TRAINING

Under the Hindi Teaching Scheme, administered by the Department of Official Language, training in Hindi language is being imparted through 119 full-time and 49 part-time centres throughout the country. Likewise, training in Hindi Stenography and Hindi Typing is being provided through 23 full-time and 38 part-time centres. Thus, training in Hindi is being provided in 229 centres located in different parts of the country. Five Regional Offices of Hindi Teaching Scheme at Kolkata, Mumbai, Delhi, Chennai and Guwahati are providing academic and administrative support to the Hindi Teaching Scheme in the East, West, North-Central, South and North-East Regions. To fulfill the increasing demand of Hindi training of North Eastern region a new Regional Headquarter has been extablished at Guwahati and new Hindi training centres have been established at Imphal, Aizwal and Agartala.

The Kendriya Hindi Prashikshan Sansthan was established on 31 August 1985, as a subordinate office of the Department of Official Language, with the objective of providing Hindi Training through condensed courses in Hindi language/ typing and stenography as also training through correspondence in Hindi language and Hindi Typwriting. Its sub-institutes were opened in Mumbai, Kolkata and Bangalore in 1988 and in Chennai and Hyderabad in 1990. Training of Hindi typing on computers is being imparted at almost all the typing/stenography centres in the country.

The Central Translation Bureau was set up in March 1971 for translation of different types of non-statutory literature, manuals/codes, forms, etc., of various Ministries/Departments, Offices of the Central Government and Public Sector Undertakings, Banks, etc. The Bureau has also been entrusted with the responsibility of conducting translation training courses for the officers/employees associated with the translation work. Initially, translation training courses of 3 months were being conducted at the Headquarters in New Delhi. In order to strengthen training facilities and meet regional requirements, Translation Training Centres have been established in Mumbai, Bangalore and Kolkata. Besides, Central Translation Bureau also conducts short-term translation courses for Central Government employees.

TECHNICAL

In order to facilitate the use of Official Language with the help of Mechanical and Electronic equipment, especially computers, a Technical Cell was set up in the Department of Official Language in October 1983. The main activities of the Cell are as under:

(i) Development of "Language application tools" - Under this programme LILA Rajbhasha, a self-learning package through the medium of Bangla, English,

Kannada, Malayalam, Tamil and Telugu has been developed. MANTRA Rajbhasha, an aid tool for English to Hindi translation has also been developed.

(ii) Organising computer training programmes in Hindi - Every year around 100 training programmes are conducted to impart training for the use of Hindi on computers.

(iii) Organising exhibitions and seminars on billingual computing - Technical seminars are held to help the users and manufacturers come face to face to discuss the use of Hindi software, etc.

The Department of Official Language has now set up its portal www.rajbhasha.gov.in

PUBLICATIONS

The Department of Official Language brings out 'Rajbhasha Bharati', a quarterly magazine, dedicated for encouraging writings in the field of Official Language, literature, technology, information technology, etc., in Hindi and also to give wide publicity to the efforts being made in different Central Government Offices for the use and propagation of Official Language Hindi. So far 112 issues of Rajbhasha Bharati have been published. Likewise, Annual Programme for implementation of the Official Language policy is brought out every year. Annual Assessment Report regarding the use of Official Language in different Ministries/Departments and offices of the Central Government/Public Sector Undertakings, etc., is also brought out every year and laid on the tables of both the houses of Parliament. Official Language Manual, Calendars, Films, Posters, etc., are also brought out to give information regarding the activities relating to propagation and progressive use of Hindi as the Official Language.

COMPTROLLER AND AUDITOR-GENERAL

Comptroller and Auditor-General is appointed by the President. Procedure and grounds for his removal from office are the same as for a Supreme Court Judge. He is not eligible for further office under the Union or a State Government after he ceases to hold his office. The President on advice of Comptroller and Auditor-General prescribes the form in which accounts of the Union and states are to be kept. His reports on accounts of the Union and states are submitted to the President and respective governors which are placed before Parliament and state legislatures.

ADMINISTRATIVE REFORMS AND PUBLIC GRIEVANCES

Department of Administrative Reforms and Public Grievances is the nodal agency of the Government for Administrative Reforms as well as redressal of public grievances relating to the States in general and grievances pertaining to Central Government agencies in particular. The Department disseminates information on important activities of the Government relating to administrative reforms best practices and public grievance redressal through publications and documentation. The Department also undertakes activities in the field of international exchange and cooperation to promote public service reforms.

The mission of the Department is to act as a facilitator, in consultation with Central Ministries/Departments, States/UT Administrations, Organisations and Civil Society Representatives, to improve Government functioning through process re-engineering, systemic changes. Organisation and Methods, efficient Grievance

handling promoting modernisation, Citizens Charters, award schemes, e-governance and best practices in government.

A Commission on Review of Administrative Laws was set up by the Department of Administrative Reforms and Public Grievances on 8 May 1998 with a view to identify proposals for amendment of the existing laws, regulations and procedures having inter-sectoral impact and also for repeal of all dysfunctional laws. The Commission submitted its report on 30 September 1998. Out of the 1382 Central Laws of different categories recommended for repeal by the Commission, 415 Acts including 5 War-time Permanent Ordinances have since been repealed. The various Ministries/Departments have decided to retain 822 Acts (which include 700 Appropriation Acts and 27 Reorganisation Acts). The remaining Acts are at various stages of processing.

The Department set up a Second Administrative Reforms Commission (ARC) in 2005 under the Chairmanship of Shri Veerappa Moily to prepare a detailed blueprint for revamping the public administrative system. The Commission has been set up by the Government of India to suggest measures to achieve a proactive, responsive, accountable, sustainable and efficient administration for the country at all levels of the government.

The Commission has so far presented the following five Reports to the Government :-

(i) Right to Information — Master Key to Good Governance (09.06.2006)

(ii) Unlocking Human Capital — Entitlements and Governance — a Case Study (31.07.2006)

(iii) Crisis Management — From Despair to Hope (31.10.2006)

(iv) Ethics in Governance (12.02.2007)

(v) Public Order — Justice for each ..... Peace for all. (25.06.2007)

A group of Ministers under the Chairmanship of Shri Pranab Mukherjee External Affairs Minister has been constituted to review the pace of implementation of the recommendations of ARC as well as to provide guidance to the concerned Ministries/Department in implementing the decisions.

The Department has also instituted in 2005, "Prime Minister's Awards for Excellence in Public administration" to recognise the extraordinary and innovative work done by the officers of the Central and State Governments. The Award comprise - i) A Medal, ii) A scroll, and, iii) Cash Award of Rs. 1,00,000. In case of a group of officials total award money for the group is Rs 5 lakh subject to a maximum of Rs One lakh per person. The amount for an organisation is upto a limit of Rs 5 lakh. All officers of the Central and State Governments individually or as a group or as organisations are eligible to be considered for the awards. The first such Awards were presented by the Prime minister on the occasion of Civil Service Day celebrations on 21.04.2007 organised at Vigyan Bhawan.

The Department has developed a Model — (SEVOTTAM) for benchmarking service delivery standards by the Government departments. The main objective of the project is to set standards in consultation with user group and include these standards in the citizen's charter. It also provides a framework to assess the performance against the standards and to measure improvement and achievements of these standards. The model is aimed to bring about excellence in service delivery

standards in government organizations and is to be implemented in all central Ministries/Departments.

The Department of Administrative Reforms and Public Grievances has the mandate of promoting good governance practices in the country. *Documentation, Incubation* and *Dissemination of Best Practices* is one of the tasks enumerated in its Vision and Mission Statement. In pursuance of this and in order to promote good governance practices in the country, the Department has adopted multipronged strategies like bringing out publications, organizing seminars, regional concerences, arranging presentations, organizing lecture series and producing documentary films. Through its regular publications, "Management in Government-a Quarterly Journal" and "Civil Service News-a Monthly News letter" Department is creating awareness about best practices. Besides, it has brought out two Books namely 'Ideas That Have Worked' and "Learn From Them". These books share experiences of success or failure of innovators. The Department has produced a DVD containing 73 select reports of commissions/committee on Administrative Reforms since 1812 till date. A portal of best practices has also been launched by the Department to effectively pursue the objective of dissemination of best practices facilitating their replication.

ADMINISTRATIVE TRIBUNALS

The enactment of Administrative Tribunals Act in 1985 opened a new chapter in the sphere of administering justice to the aggrieved government servants. Administrative Tribunals Act owes its origin to Article 323-A of the Constitution which empowers Central Government to set-up by an Act of Parliament, Administrative Tribunals for adjudication of disputes and complaints with respect to recruitment and conditions of service of persons appointed to the public service and posts in connection with the affairs of the Union and the States. In pursuance of the provisions contained in the Administrative Tribunals Act, 1985, the Administrative Tribunals set-up under it exercise original jurisdiction in respect of service matters of employees covered by it. As a result of the judgement dated 18 March 1997 of the Supreme Court, the appeals against the orders of an Administrative Tribunal shall lie before the Division Bench of the concerned High Court.

The Administrative Tribunals exercise jurisdiction only in relation to the service matters of the litigants covered by the Act. The procedural simplicity of the Act can be appreciated from the fact that the aggrieved person can also appear before it personally. The Government can present its case through its departmental officers or legal practitioners. Thus, the objective of the Tribunal is to provide for speedy and inexpensive justice to the litigants.

The Act provides for establishment of Central Administrative Tribunal (CAT) and the State Administrative Tribunals. The CAT was set-up on 1 November 1985. Today, it has 17 regular benches, 15 of which operate at the principal seats of High Courts and the remaining two at Jaipur and Lucknow. These Benches also hold circuit sittings at other seats of High Courts. In brief, the tribunal consists of a Chairman, Vice-Chairman and Members. The Members are drawn, both from judicial as well as administrative streams so as to give the Tribunal the benefit of expertise both in legal and administrative spheres.

THE STATES

The system of government in States closely resembles that of the Union.

EXECUTIVE

GOVERNOR

State executive consists of Governor and Council of Ministers with Chief Minister as its head. The Governor of a State is appointed by the President for a term of five years and holds office during his pleasure. Only Indian citizens above 35 years of age are eligible for appointment to this office. Executive power of the State is vested in Governor.

Council of Ministers with Chief Minister as head, aids and advises Governor in exercise of his functions except in so far as he is by or under the Constitution required to exercise his functions or any of them in his discretion. In respect of Nagaland, Governor has special responsibility under Article 371 A of the Constitution with respect to law and order and even though it is necessary for him to consult Council of Ministers in matters relating to law and order, he can exercise his individual judgement as to the action to be taken.

Similarly, in respect of Arunachal Pradesh, Governor has special responsibility under Article 371H of the Constitution with respect to law and order and in discharge of his functions in relation thereto. Governor shall, after consulting Council of Ministers, exercise his individual judgement as to the action to be taken. These are, however, temporary provisions if President, on receipt of a report from Governor or otherwise is satisfied that it is no longer necessary for Governor to have special responsibility with respect to law and order, he may so direct by an order.

Likewise, in the Sixth Schedule which applies to tribal areas of Assam, Meghalaya, Tripura and Mizoram as specified in para 20 of that Schedule, discretionary powers are given to Governor in matters relating to sharing of royalties between district council and state government. Sixth Schedule vests additional discretionary powers in Governors of Mizoram and Tripura in almost all their functions (except approving regulations for levy of taxes and money lending by non-tribals by district councils) since December 1998. In Sikkim, Governor has been given special responsibility for peace and social and economic advancement of different sections of population.

All Governors while discharging such constitutional functions as appointment of Chief Minister of a State or sending a report to President about failure of constitutional machinery in a State or in respect of matters relating to assent to a Bill passed by legislature, exercise their own judgement.

COUNCIL OF MINISTERS

The Chief Minister is appointed by the Governor who also appoints other ministers on the advice of the Chief Minister. The Council of Ministers is collectively responsible to legislative assembly of the State.

LEGISLATURE

For every state, there is a legislature which consists of Governor and one House or, two Houses as the case may be. In Bihar, Jammu and Kashmir, Karnataka, Maharashtra and Uttar Pradesh, there are two Houses known as legislative council and legislative assembly. In the remaining states, there is only one House known as legislative assembly. Parliament may, by law, provide for abolition of an existing legislative council or for creation of one where it does not exist, if proposal is supported by a resolution of the legislative assembly concerned.

LEGISLATIVE COUNCIL

Legislative Council *(Vidhan Parishad)* of a state comprises not more than one-third of total number of members in legislative assembly of the state and in no case less than 40 members (Legislative Council of Jammu and Kashmir has 36 members vide Section 50 of the Constitution of Jammu and Kashmir). About one-third of members of the council are elected by members of legislative assembly from amongst persons who are not its members, one-third by electorates consisting of members of municipalities, district boards and other local authorities in the state, one-twelfth by electorate consisting of persons who have been, for at least three years, engaged in teaching in educational institutions within the state not lower in standard than secondary school and a further one-twelfth by registered graduates of more than three years standing. Remaining members are nominated by Governor from among those who have distinguished themselves in literature, science, art, cooperative movement and social service. Legislative councils are not subject to dissolution but one-third of their members retire every second year.

LEGISLATIVE ASSEMBLY

Legislative Assembly *(Vidhan Sabha)* of a state consists of not more than 500 and not less than 60 members (Legislative Assembly of Sikkim has 32 members vide Article 371F of the Constitution) chosen by direct election from territorial constituencies in the state. Demarcation of territorial constituencies is to be done in such a manner that the ratio between population of each constituency and number of seats allotted to it, as far as practicable, is the same throughout the state. Term of an assembly is five years unless it is dissolved earlier.

POWERS AND FUNCTIONS

State legislature has exclusive powers over subjects enumerated in List II of the Seventh Schedule of the Constitution and concurrent powers over those enumerated in List III. Financial powers of legislature include authorisation of all expenditure, taxation and borrowing by the state government. Legislative assembly alone has power to originate money bills. Legislative council can make only recommendations in respect of changes it considers necessary within a period of fourteen days of the receipt of money bills from Assembly. Assembly can accept or reject these recommendations.

RESERVATION OF BILLS

The Governor of a state may reserve any Bill for the consideration of the President. Bills relating to subjects like compulsory acquisition of property, measures affecting powers and position of High Courts and imposition of taxes on storage, distribution and sale of water or electricity in inter-state river or river valley development projects should necessarily be so reserved. No Bills seeking to impose restrictions on inter-state trade can be introduced in a state legislature without previous sanction of the President.

CONTROL OVER EXECUTIVE

State legislatures, apart from exercising the usual power of financial control, use all normal parliamentary devices like questions, discussions, debates, adjournments and no-confidence motions and resolutions to keep a watch over day-to-day work of the executive. They also have their committees on estimates and public accounts to ensure that grants sanctioned by legislature are properly utilised.

UNION TERRITORIES

Union Territories are administrated by the President acting to such extent, as he thinks fit, through an Administrator appointed by him. Administrators of Andaman and Nicobar Islands, Delhi and Pondicherry are designated as Lieutenant Governors. The Governor of Punjab is concurrently the Administrator of Chandigarh. The Administrator of Dadra and Nagar Haveli is concurrently the Administrator of Daman and Diu. Lakshadweep has a separate Administrator.

The National Capital Territory of Delhi and Union Territory of Pondicherry each has a legislative assembly and council of ministers. Legislative assembly of Union Territory of Pondicherry may make laws with respect to matters enumerated in List II or List III in the Seventh Schedule of the Constitution in so far as these matters are applicable in relation to the Union Territory. The legislative assembly of National Capital Territory of Delhi has also these powers with the exceptions that Entries 1, 2 and 18 of the List II are not within the legislative competence of the legislative assembly. Certain categories of Bills, however, require the prior approval of the Central Government for introduction in the legislative assembly. Some Bills, passed by the legislative assembly of the Union Territory of Pondicherry and National Capital Territory of Delhi are required to be reserved for consideration and assent of the President.

LOCAL GOVERNMENT

MUNICIPALITIES

Municipal bodies have a long history in India. The first such Municipal Corporation was set-up in the former Presidency Town of Madras in 1688; and was followed by similar corporations in the then Bombay and Calcutta in 1726. The Constitution of India has made detailed provisions for ensuring protection of democracy in Parliament and in the state legislatures. However, Constitution did not make the local self-government in urban areas a clear-cut constitutional obligation. While the Directive Principles of State Policy refer to village *Panchayats,* there is no specific reference to Municipalities except the implicity in Entry 5 of the State List, which places the subject of local self-governments as a responsibility of the states.

In order to provide for a common framework for urban local bodies and help to strengthen the functioning of the bodies as effective democratic units of self-government, Parliament enacted the Constitution (74th Amendment) Act, 1992 (known as Nagarpalika Act) relating to municipalities in 1992. The Act received the assent of the President on 20 April 1993. The Government of India notified 1 June 1993 as the date from which the said Act came into force. A new part IX-A relating to the Municipalities has been incorporated in the Constitution to provide for among other things, constitution of three types of Municipalities, i.e., *Nagar Panchayats* for areas in transition from a rural area to urban area, Municipal Councils for smaller urban areas and Municipal Corporation for large urban areas, fixed duration of municipalities, appointment of state election commission, appointment of state finance commission and constitution of metropolitan and district planning committees. All State/UT Administrations have set-up their state election commissions and Finance Commissions.

PANCHAYATS

Article 40 of the Constitution which enshrines one of the Directive Principles of State Policy lays down that the State shall take steps to organise village *panchayats*

and endow them with such powers and, authority as may be necessary to enable them to function as units of self-government.

In the light of the above a new Part IX relating to the Panchayats has been inserted in the Constitution to provide for among other things, *Gram Sabha* in a village or group of villages; constitution of Panchayats at village and other level or levels; direct elections to all seats in Panchayats at the village and intermediate level, if any, and to the offices of Chairpersons of Panchayats at such levels; reservation of seats for the Scheduled Castes and Scheduled Tribes in proportion to their population for membership of Panchayats and office of Chairpersons in Panchayats at each level; reservation of not less than one-third of the seats for women; fixing tenure of five years for Panchayats and holding elections within a period of six months in the event of supersession of any Panchayat.

ELECTION COMMISSION

The superintendence, direction and control of preparation of electoral rolls for, and the conduct of, elections to Parliament and State Legislatures and elections to the offices of the President and the Vice-President of India are vested in the Election Commission of India. It is an independent constitutional authority. Since its inception in 1950 and till October 1989, the Commission functioned as a single member body consisting of the Chief Election Commissioner. On 16 October 1989, the President appointed two more Election Commissioners on the eve of the General Election to the House of the People held in November-December 1989. However, the said two Commissioners ceased to hold office on 1 January 1990 when those two posts of Election Commissioners were abolished. Again on 1 October 1993, the President appointed two more Election Commissioners. Simultaneously, the Chief Election Commissioner and other Election Commissioners (Conditions of Service) Act, 1991 was amended to provide that the Chief Election Commissioner and other Election Commissioners will enjoy equal powers and will receive equal salary, allowances and other perquisites as payable to a judge of the Supreme Court of India. The Act further provided that in case of difference of opinion amongst the Chief Election Commissioner and/or two other Election Commissioners, the matter will be decided by the Commission by majority. The validity of that Act (renamed in 1993 as the Election Commission) (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991 was challenged before the Supreme Court. The Constitution Bench of the Supreme Court consisting of five judges, however, dismissed the petitions and upheld the provisions of the above law by a unanimous judgement on 14 July 1995.

Independence of the Election Commission and its insulation from executive interference is ensured by a specific provision under Article 324(5) of the Constitution that the Chief Election Commissioner shall not be removed from his office except in like manner and on like grounds as a Judge of the Supreme Court and conditions of his service shall not be varied to his disadvantage after his appointment. The other Election Commissioners cannot be removed from office except on recommendation of the Chief Election Commissioner. The term of office of the Chief Election Commissioner and other Election Commissioners is six years from the date he/she assumes office or till the day he/she attains the age of 65 years, whichever is earlier.

AMENDMENTS

The Parliament on 22 March 2003 enacted the Election Laws (Amendment) Act, 2003 and Conduct of Elections (Amendment) Rules, 2003 which came into force with effect from 22 September 2003. By these amendments in the Act and Rules, those service voters belonging to the Armed Forces and members belonging to a Force to which provisions of the Army Act applies, have been provided the facility to opt to vote through proxy. Such service voter who opt to vote through proxy have to appoint a proxy in a prescribed format and intimate the Returning Officer of the constituency.

The Election and Other Related Laws (Amendment) Act, 2003 (46 of 2003) was enacted in 11 September 2003. By this amendment, new Section 29B and 29C were inserted in the Principal Act providing for contribution by any person or company other than a Government company to political parties, subject to the condition that any contribution in excess of Rs 20,000 shall be reported to the Election Commission for any claim for Tax relief under the Income Tax Act, 1961. The Act also inserted Part A (Section 78A and 78B) regarding supply of copies of electoral rolls and certain other items to candidates of recognised political parties. This Act also amended Section 77(1) regarding maintenance of election expenses by candidates whereby expenditure incurred by specified number of 'leaders' of a political party on account of travel by air or by any other means of transport for propagating programme of the political party alone shall be exempted from being included in the account of election expenses incurred by the candidate in connection with the election.

The Parliament on 1 January 2004 enacted the Delimitation (Amendment) Act, 2003 whereby Section 4 of the Principal Act was amended to provide that the Delimitation will be held on the basis of the 2001 Census figures.

The Parliament on 28 August 2003 enacted the Representation of the People (Amendment) Act, 2003 whereby open ballot system was introduced at elections to the Council of States. In this system an elector who belongs to a political party is required to show the ballot paper after marking his vote to an authorised agent of that political party. The requirement that a candidate contesting an election to the Council of States from a particular State should be an elector in that particular State was also dispensed with.

ELECTORAL REFORMS

In C.W.P. No. 4912 of 1998 (*Kushra Bharat Vs. Union of India and Others*), the Delhi High Court directed that information relating to government dues owed by candidates to the departments dealing with Government accommodation, electricity, water, telephone and transport (including aircrafts and helicopters) and any other dues should be furnished by the candidates and this information should be published by the election authorities under the Commission in at least two newspapers having local circulation, for information of electors. Accordingly, the Commission modified items 3(a)(iii) of the format of the affidavit prescribed vide its order dated 27 March 2003 relating to right to information of electors regarding the background of candidates and also issued necessary directions to the District Election Officers regarding publication of the information furnished by the candidates in the newspapers as directed by the Delhi High Court.

GENERAL ELECTIONS 2004

Elections in India are events involving political mobilisation and organisational complexity on an amazing scale. The General Elections to the 14th Lok Sabha, the House of People were due in October 2004 but consequent to early dissolution of the House, the Election Commission of India decided to hold the elections to the Lok Sabha, State Legislative Assemblies of Andhra Pradesh, Karnataka, Orissa and Sikkim, as well as fifteen bye-elections in variuos states during April-May 2004.

General Elections 2004

Total Seats (Lok Sabha)	543
Electorate	67,14,87,930
Number of election personnel engaged	Approx. 4 million excluding para-military and police personnel
Number of EVMs used	1.075 million
Direct expenditure incurred	Approx. Rs 13,000 million

Number and Types of Lok Sabha Constituencies

For General Candidates	423
Reserved for Scheduled Caste Candidates	79
Reserved for Scheduled Tribe Candidates	41
Total Constituencies	543

On 29 February 2004, the Election Commission of India announced the schedule of elections, with polling to be held in four phases on 20 and 26 April and 5 and 10 May 2004. The phasing of the elections has become a necessity over the years due to large requirement of paramilitary forces and time needed for their movement across various states. The phasing of polls pays rich dividends was brought out by the fact that poll related violence came down substantially. Later, the Commission decided to hold elections for two seats in Tripura on 22 April instead of 20 April 2004 and for one seat in Andaman and Nicobar Islands on 20 April instead of 10 May 2004.

Electronic Voting Machine : The Representation of People Act, 1951 was amended by the Indian Parliament in 1989 to facilitate the use of EVMs. However, they were really put to use only after a decade, when the Commission took a bold initiative for introducing EVMs in 16 Assembly Constituencies during State Legislative Assembly Elections in November 1998. In General Elections 2004, EVMs were used for the first time throughout the country making the elections go fully electronic. The user-friendly EVMs could be used even by the illiterates with ease. Since the EVMs work on battery, electricity was not a problem. The polling personnel carried EVMs in convenient boxes. The use of EVMs was preceded by an elaborate training programme and widespread campaign to educate the voters, candidates, political parties, media and the election staff. The failure rate of the machines was negligible. The use of EVMs saved around 1,50,000 trees which would have otherwise been cut for production of about 8,000 tonnes of paper required for printing the ballot papers, if traditional system of ballot boxes was adopted. EVMs were transported to polling stations by all imaginable means.

Political Parties : For these elections, there were six National Parties, forty-three State Parties and 854 Registered Unrecognised Parties. Since about a decade, regional and smaller parties gained importance in Indian polity. They have played a major role in Government formation through pre-poll and post-poll alliances. There are no permanent friends or foes in politics becomes clear when Indian context is analysed.

Candidates : There were 5,435 candidates for 543 Lok Sabha seats and 4,504 candidates for 697 seats in four State Legislative Assemblies. The number of women candidates was 354 and 324 respectively. Though the ceilings for expenses to be incurred by the candidates were raised, due to strict observance of Model Code of Conduct and monitoring of election expenses, the overt publicity remained subdued. To ensure a level playing field, the Supreme Court of India ordered regulation of advertisements on electronic media to be put by the candidates and political parties. The candidates were required to file affidavits declaring their assets and liabilities, educational qualifications, Government dues and criminal cases pending against them, if any. These affidavits were displayed on the notice boards of the offices of the Returning Officers, and placed on the website of the Commission to enable the electors make their informed choice. Some NGOs compiled this information and circulated the same for the benefit of the voters.

Results : There were more than 1,200 counting centres spread over about 850 towns in the country. The counting of votes for Andhra Pradesh State Legislative Assembly was undertaken on 11 May 2004 and for Lok Sabha, other State Legislative Assemblies and bye-elections on 13 May. The use of EVMs made the process of counting easier and faster. The Commission made elaborate arrangements to receive directly results from the Returning Officers using GENESYS software. The Commission's website received more than 10 million hits on the day of counting.

Elections to Legislative Assemblies : The General Election to the Legislative Assemblies of Gujarat and Jammu and Kashmir were held on 12 December and in September-October 2002 respectively. Similarly poll to the Legislative Assemblies of Himachal Pradesh, Meghalaya, Nagaland and Tripura were held on 26 February 2003. The General Elections to the Legislative Assemblies of Mizoram was held on 20 November 2003 and that of Chhattisgarh, Madhya Pradesh, Rajasthan and NCT of Delhi were held on 1 December 2003.

General Election to Legislative Assemblies of Andhra Pradesh, Karnataka, Orissa and Sikkim were held in different phases as detailed below :

State(s)/UT(s)	Phase	Date of Poll
Andhra Pradesh	I	20 April 2004
	II	26 April 2004
Karnataka	I	20 April 2004
	II	26 April 2004
Orissa	I	20 April 2004
	II	26 April 2004
Sikim	-	10 May 2004

General Elections held in 2005 : In this year elections were held to Legislative Assemblies of three States, namely, 1. Bihar, 2. Haryana and 3. Jharkhand. The poll programme is as given below:

	Phase I	Phase	Phase III	Total
Date of Poll	03-02-05	15-02-05	23-02-05	
Bihar	64	86	93	243
Haryana	90	-	-	90
Jharkhand	24	29	28	81

Elections were held in Bihar State again in the same year as the Legislative Assembly was dissolved by the Honorable President of India. This election was held in the month of October 2005 as below:

	Phase I	Phase II	Phase III	Phase IV	Total
Date of Poll	18-10-05	26-10-05	13-11-05	19-11-05	
Bihar	61	69	72	41	243

General Elections held in 2006 : In this year the term of 5 State Assemblies had expired and the elections as per the following schedule was held:

	Phase I	Phase II	Phase III	Phase IV	Total
Assam	03-04-06	10-04-06	-	-	-
ACs (126)	65	61			
Kerala	22-04-06	29-04-06	03-05-06	-	-
ACs (146)	59	66	15		
Tamil Nadu	08-05-06	-	-	-	-
ACs (234)	234				
West Bengal	17-05-06	22-04-06	27-04-06	03-05-06	08-05-06
ACs (294)	45	66	77	57	49
Pondicherry	03-05-06	08-05-06	-	-	-
ACs (30)	3	27			

* General Elections held in 2007 (Annexure-II)

The term of State Legislative Assemblies of Manipur, Uttarakhand, Punjab, Uttar Pradesh and Goa expired during the months of March-June, 2007 and the poll which constituted the new assembly in those states was taken as per the following schedule :-

Annexure-II

State	1st Phase	2nd Phase	3rd Phase	4th Phase	5th Phase	6th Phase	7th Phase
Manipur	08.02.07	14.02.07	23.02.07				
Total Number of ACs (60)	19	29	12				
Uttarakhand	21.02.07						
Total number of ACs (70)	70 (All ACs)						
Punjab	13.02.07						
Total Number of	117						

ACs (117)	(All ACs)						
Uttar Pradesh	07.04.07	13.04.07	18.04.07	23.04.07	28.04.07	03.05.07	08.05.07
Total Number of ACs (403)	62	58	57	57	58	52	59
Goa	02.06.07						
Total number of ACs (40)	All Acs						

The counting of votes in respect of Manipur, Uttarakhand, Punjab and Uttar Pradesh was taken up on 27.02.07 and 11.05.07 respectively and that of Goa was taken up on 05.06.07. The term of Gujarat Legislative Assembly is up to 26.12.07.

The Commission will initiate action in due course so as to constitute the new Assembly in Gujarat within the stipulated time in normal case.

The General Elections to the State Legislative Assemblies of Himachal Pradesh, Meghalaya, Nagaland, Tripura, Jammu & Kashmir, Madhya Pradesh, Mizoram, NCT of Delhi and Chhattisgarh are to be held in the year, 2008. The term of State Legislative Assemblies of the said States is given below :-

Sl. No.	State	Term Assembly	Total number of Assembly Constituencies	Remarks
1.	Himachal Pradesh	09.03.2008	68	
2.	Meghalaya	10.03.2008	60	
3.	Nagaland	13.03.2008	60	
4.	Tripura	19.03.2008	60	
5.	Jammu & Kashmir	20.11.2008	87	Term of J&K Assembly is for 6 years (Art. 52 of Constitution of J&K)
6.	Madhya Pradesh	14.12.2008	230	
7.	Mirozm	14.12.2008	40	
8.	NCT of Delhi	17.12.2008	70	
9.	Chhattisgarh	21.12.2008	90	

TABLE 3.1 : LOK SABHA AND ITS SPEAKER(s) FROM TIME TO TIME

LOK SABHA	Date of first meeting after its constitution	Date of dissolution	SPEAKER[1]		
			Name	From	To
First Lok Sabha	13 May 1952	4 April 1957[2]	Ganesh Vasudev Mavalankar	15 May 1952	27 February 1956[3]
			M. Ananthasayanam Ayyangar	8 March 1956	10 May 1957
Second Lok Sabha	10 May 1957	31 March 1962[4]	M. Ananthasayanam Ayyangar	11 May 1957	16 April 1962
Third Lok Sabha	16 April 1962	3 March 1967[5]	Hukam Singh	17 April 1962	16 March 1967
Fourth Lok Sabha	16 March 1967	27 December 1970[6]	Neelam Sanjiva Reddy	17 March 1967	19 July 1969[7]
			Gurdial Singh Dhillon	8 August 1969	19 March 1971
Fifth Lok Sabha	19 March 1971	18 January 1977[8]	Gurdial Singh Dhillon	22 March 1971	1 December 1975[9]
			Bali Ram Bhagat	5 January 1976	25 March 1977
Sixth Lok Sabha	25 March 1977	22 August 1979[10]	Neelam Sanjiva Reddy	26 March 1977	13 July 1977[11]
			K.S. Hegde	21 July 1977	21 January 1980
Seventh Lok Sabha	21 January 1980	31 December 1984[12]	Bal Ram Jakhar	22 January 1980	15 January 1985
Eighth Lok Sabha	15 January 1985	27 November 1989[13]	Bal Ram Jakhar	16 January 1985	18 December 1989
Ninth Lok Sabha	18 December 1989	13 March 1991[14]	Rabi Ray	19 December 1989	9 July 1991
Tenth Lok Sabha	9 July 1991	10 May 1996	Shivraj V. Patil	10 July 1991	22 May 1996
Eleventh Lok Sabha	22 May 1996	4 December 1997[15]	P.A. Sangma	23 May 1996	23 March 1998 (FN)
Twelfth Lok Sabha	23 March 1998	26 April 1999[16]	G.M.C. Balayogi	24 March 1998	20 October 1999 (FN)
Thirteenth Lok Sabha	20 October 1999	6 February 2004[18]	G.M.C. Balayogi	22 October 1999	3 March 2002[17]
			Manohar Gajanan Joshi	10 May 2002	2 June 2004
Fourteenth Lok Sabha	2 June 2004	--	Somnath Chatterjee	4 June 2004	Till Date

[1] Under Article 94 of the Constitution, in case of dissolution of the Lok Sabha, the Speaker does not vacate his office until immediately before the first meeting of the House after dissolution.

[2] Dissolved 38 days before expiry of its term.

TABLE 3.1 (Contd.)

[3] Died.

[4] Dissolved 40 days before expiry of its term.

[5] Dissolved 44 days before expiry of its term.

[6] Dissolved one year and 79 days before expiry of its term.

[7] Resigned.

[8] Term of the Lok Sabha which was to expire on 18 March 1976 was extended by one year upto 18 March 1977 by the House of the People (Extension of Duration) Act, 1976. It was extended for a further period of one year upto 18 March 1978 by the House of the People (Extension of Duration) Amendment Act, 1976. However, the House was dissolved after having been in existence for a period of five years, 10 months and six days.

[9] Resigned.

[10] House was dissolved after having been in existence for a period of two years, four months and 28 days.

[11] Resigned.

[12] Dissolved 20 days before expiry of its term.

[13] Dissolved 48 days before expiry of its term.

[14] Dissolved after having been in existence for a period of one year, two months and 25 days.

[15] House was dissolved after having been in existence for a period of one year, six months and 13 days.

[16] **House was dissolved after having been in existence for a period of one year, one month and four days.**

[17] **Died.**

[18] **Dissolved 253 days before expiry of its term.**

TABLE 3.2 : STATE-WISE ALLOCATION OF SEATS IN THE TWO HOUSES OF PARLIAMENT AND PARTY POSITION IN LOK SABHA (AS ON 31.7.2006)

State/UTs	No. of Seats in Rajya Sabha	No. of Seats in Lok Sabha	INC	BJP	CPI(M)	SP	RJD	BSP	DMK	SS	BJD	CPI	NCP	JD(U)	SAD	IND.	Others	Vacancies
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
STATES																		
ANDHRA PRADESH	18	42	29	-	1	-	-	-	-	-	-	1	-	-	-	-	11(A)	-
ARUNACHAL PRADESH	1	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASSAM	7	14	9	2	-	-	-	-	-	-	-	-	-	-	-	1	2(B)	-
BIHAR	16	40	3	4	-	-	22	-	-	-	-	-	-	5	-	-	4(C)	2
CHHATTISGARH	5	11	1	9	-	-	-	-	-	-	-	-	-	-	-	-	-	1
GOA	1	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GUJARAT	11	26	12	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HARYANA	5	10	9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HIMACHAL PRADESH	3	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
JAMMU AND KASHMIR	4	6	2	-	-	-	-	-	-	-	-	-	-	-	-	1	3(D)	-
JHARKHAND	6	14	6	-	-	-	1	-	-	-	-	1	-	-	-	-	4(E)	2
KARNATAKA	12	28	9	16	-	1	-	-	-	-	-	-	-	-	-	-	2(F)	-
KERALA	9	20	-	-	12	-	-	-	-	-	-	3	-	-	-	1	4(G)	-
MADHYA PRADESH	11	29	3	23	-	-	-	-	-	-	-	-	-	-	-	-	-	3
MAHARASHTRA	19	48	13	11	-	-	-	-	-	12	-	-	9	-	-	-	1(H)	2
MANIPUR	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEGHALAYA	1	2	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
MIZORAM	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1(I)	-
NAGALAND	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1(J)	-
ORISSA	10	21	2	7	-	-	-	-	-	-	11	-	-	-	-	-	1(K)	-
PUNJAB	7	13	2	3	-	-	-	-	-	-	-	-	-	-	8	-	-	-
RAJASTHAN	10	25	4	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIKKIM	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1(L)	-
TAMIL NADU	18	39	10	-	2	-	-	-	16	-	-	2	-	-	-	-	9(M)	-

TABLE 3.2 (Contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
TRIPURA	1	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
UTTARANCHAL	3	5	1	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-
UTTARAKHAND	31	80	9	10	-	36	-	15	-	-	-	-	-	1	-	1	5(N)	3
WEST BENGAL	16	42	5	-	25	-	-	-	-	-	-	3	-	-	-	-	6(O)	3
NOMINATED	12	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UNION TERRITORIES																		
A & N ISLANDS	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHANDIGARH	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DADRA & NAGAR HAVELI	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1(P)	-
DAMAN & DIU	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
THE NCT OF DELHI	3	7	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LAKSHADWEEP	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
PONDICHERRY	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1(q)	-
TOTAL	245	543	146	128	42	38	23	15	16	12	11	10	10	7	8	5	57	17

a. Telangana Rashtra Samiti-5; Telugu Desam-5; All India Majlis-e-Ittehadul Muslimeen-1
b. Asom Gana Parishad-2
c. Lok Jan Shakti Party-4
d. Jammu and Kashmir National Conference-2; Jammu and Kashmir Peoples Democratic Party-1
e. Jharkhand Mukti Morcha-4
f. Janata Dal (Secular)-2
g. Janata Dal (Secular)-1; Muslim League Kerala State Committee-1; Kerala Congress-2
h. Republican Party of India (A)-1
i. Mizo National Front-1
j. Nagaland Peoples Front-1
k. Jharkhand Mukti Morcha-1
l. Sikkim Democratic Front-1
m. Pattali Makkal Katchi-5; Marumaralchi Dravida Munnetra Kzhgram-4
n. Rashtriya Lok Dal-3; National Loktantrik Party-1; Samajwadi Janata Party (Rashtriya)-1
o. Revolutionary Socialist Party-3; All India Trinamool Congress-1; All India Forward Bloc-3
p. Bharatiya Navshakti Party-1
q. Pattali Makkal Katchi-1

4 Agriculture

AGRICULTURE is the mainstay of the Indian economy. Agriculture and allied sectors contribute nearly 22 per cent of Gross Domestic Product (GDP of India), while about 65-70 per cent of the population is dependent on agriculture for their livelihood. The agricultural output, however, depends on monsoon as nearly 60 per cent of area sown is dependent on rainfall. During 2005, South West monsoon was not well distributed in time. It was below normal in June, active in July, subdued in August and became active in September over the country. For the country as a whole, the seasonal rainfall from 1 June to 30 September was 99 per cent of its long period average (LPA). According to the Third Advance Estimates on production of foodgrains and commercial crops released on 5 May 2006 the production of foodgrains during 2005-06 was estimated at 210.01 million tonnes, which is more than the foodgrains production of 2004-05 by 11.65 million tonnes or 5.9 per cent. The estimated production of rice at 89.88 million tonnes increased by 6.75 million tonnes or 8.1 per cent as compared to 2004-05. The production of wheat during 2005-06 estimated at 71.54 million tonnes exceeds last year's production by 2.90 million tonnes or 4.2 per cent. The production of coarse cereals estimated at 34.67 million tonnes is more than last year's production by 1.21 million tonnes or by 3.6 per cent. The production of bajra was estimated at 8.31 million tonnes indicating a marginal increase of 4.8 per cent over last year's production of 7.93 million tonnes. In case of maize the production was estimated at 14.89 million tonnes which is more than last year's production by 0.71 million tonnes or 5.0 per cent. The expected production of total pulses at 13.92 million tonnes shows a 6.0 per cent increase over the last year's production of 13.13 million tonnes.

The estimated production of total oilseeds at 26.70 million tonnes in 2005-06 is more than the last year's production by 2.34 million tonnes or by 9.6 per cent. The production of cotton in 2005-06 was estimated at 18.93 million bales of 170 kg each which is more than the last year's production level by 2.50 million bales indicating an increase of 15.2 per cent. Jute and Mesta production during 2005-06 was estimated at 10.83 million bales of 180 kg each which is more than last year's production of 10.27 million bales or by 5.5 per cent. Sugarcane production was estimated at 273.16 million tonnes, showing an increase of 36.07 million tonnes or 15.2 per cent over the preceding year's production of 237.09 million tonnes

Annual growth of crop area, production and yield in respect of cereals, oilseeds and other crops is given below:

TABLE 4.1 : ANNUAL COMPOUND GROWTH OF CROP AREA, PRODUCTION AND PRODUCTIVITY

(per cent per annum)

	2003-04			2004-05		
Crop	Area	Production	Yield	Area	Production	Yield
Rice	3.4	23.3	19.2	-1.6	-6.1	-4.6
Wheat	5.6	9.7	4.0	-0.8	-4.9	-4.1
Coarse Cereals	14.1	44.9	27.0	-5.8	-11.6	-6.2

Total Cereals	7.1	21.0	13.0	-2.7	-6.5	-3.9
Total Pulses	14.5	33.1	16.3	-3.0	-10.7	-8.0
Foodgrains	8.4	22.6	13.0	-2.7	-7.1	-4.5
Nine Oilseeds	10.1	69.8	54.2	16.3	-2.5	-16.2
Cotton (lint)	-0.9	59.2	60.7	15.6	19.7	3.5
Sugarcane	-12.9	-18.6	-6.6	-7.0	1.4	9.0
Non Foodgrains	8.1	19.2	10.2	9.8	2.5	-6.6
All Principal Crops	8.3	21.0	11.7	0.7	-2.7	-3.5

Based on Index Numbers with Triennium ending 1993-94 = 100

LAND UTILISATION

Land utilisation statistics are available for 92.9 per cent of total geographical area of 3,287.3 lakh hectares. According to Land Use Statistics available from the States, the area under forest had increased from 404.8 lakh hectares in 1950-51 to 695.5 lakh hectares in 2003-04. Net sown area increased from 1,187.5 lakh hectares to 1,409.6 lakh hectares during the same period. Broad cropping pattern indicates that though foodgrains have a preponderance in gross cropped area as compared to non-foodgrains, their relative share came down from 76.7 per cent during 1950-51 to 65.6 per cent during 2003-04.

TECHNOLOGY MISSION ON OILSEEDS, PULSES AND MAIZE

The Technology Mission on Oilseeds was launched by the Central Government in 1986 to increase the production of oilseeds to reduce import and achieve self-sufficiency in edible oils. Subsequently, pulses, oil palm and maize were also brought within the purview of the Mission in 1990-91, 1992 and 1995-96 respectively. In addition the National Oilseeds and Vegetable Oils Development (NOVOD) Board also supplement the efforts of TMOP by opening of newer areas for non-traditional oilseeds. It is promoting tree-borne oilseeds. The schemes implemented under TMOP are (i) Oilseeds Production Programme (OPP) (ii) National Pulses Development Project (NPDP) (iii) Accelerated Maize Development Programme (AMDP) (iv) Post Harvest Technology (PHT) (v) Oil Palm Development Programme (OPDP) and (vi) National Oilseeds and Vegetable Oils Development Board (NOVOD).

During the Tenth Plan these schemes have been restructured as (i) Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM) by converging the ongoing schemes of OPP, NPDP, AMDP and OPDP, (ii) Research and Development in Post Harvest and Processing Technology (PHT) in Oilseeds, Pulses, Oil Palm and Maize including TMOP Headquarter, and (iii) Integrated Development of Tree Borne Oilseeds to be implemented by NOVOD Board.

Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize : In order to provide flexibility to the States in implementation based on regionally differentiated approach, to promote crop diversification and to provide focused approach to the programmes, the four on-going schemes of OPP, OPDP, NPDP, and AMDP have been merged into one Centrally Sponsored Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM)during the 10th Five year Plan which is being implemented with effect from 1 April 2004. The scheme is being implemented in 14 major oilseeds and pulses growing States for oilseeds and pulses and 15 major maize growing states for Maize and in 10 states for oil palm.

The ISOPOM has the following special features (i) Flexibility, allowing the States

to utilise the funds for the scheme / crop of their choice; (ii) Annual action plan to be formulated by the State Governments for consideration and approval of the Government of India; (iii) Flexibility, allowing the State to introduce innovative measures or any special component to the extent of 10 per cent of financial allocation (iv) Involvement of private sector by the State Governments for the implementation of the programme with a financial cap of 15 per cent (v) Flexibility for inter-component diversion of funds upto 20 per cent for non-seed components only and (vi) Diversion of funds from seed components to non-seed components with prior approval of the Department of Agriculture and Cooperation.

New components of ISOPOM included during 10th Plan are: (i) Inclusion of HDPE pipes; (ii) Publicity; (iii) Involvement of Private Sector including NGOs, Farmers' Organisation, Cooperative bodies, Public Sector Agencies, etc; (iv) Innovative measures and additional components; (v) Training of Officers / Extension workers; and (vi) Foreign Visits.

Implementation of oilseeds production programme has helped in increasing the production of oilseeds from 108.30 lakh tonnes in 1985-86 to 266.97(IIIrd Advance Estimate) lakh tonnes during 2005-06. The pulses production in the country increased from 128.60 lakh in 1989-90 to 139.20(IIIrd Advance Estimate) tonnes in 2005-06. The area under oil palm increased from 8585 ha. at the end of 1992-93 to 71938 ha. upto 2005-06. Actual production of Fresh Fruit Bunches (FFBs) upto 2003-04 was 40,000 tonnes (Approx.) yielding around 25,000 tonnes (Approx.) of crude palm oil (CPO). The production of maize increased from 88.84 lakh tonnes in 1994-95 to 149.9 lakh tonnes in 2003-04.

Research and development in Post Harvest and Processing Technology in Oilseeds, Pulses, Oil Palm and Maize: The scheme of Post Harvest Technology (PHT) for Oilseeds, Pulses and Maize was brought under the purview of the TMOP with the objective of stepping up their production through efficient scientific processing for realising the ultimate objective of self-reliance in edible oils and other crops and bringing about a position of zero imports.

The Technology Mission laid emphasise on development of Post Harvest Technology (PHT) with the following objectives: (i) Optimising oil recovery from oilseeds by developing efficient modern oil expellers; (ii) Tapping full potential of Rice Bran Oil (RBO) – in the country; (iii) Developing value added products in respect of oilseeds, pulses and maize so that farmers are able to get a better / remunerative price; (iv) Designing and developing indigenous technology for processing of non-conventional and tree borne oilseeds including oil palm; (v) Developing of indigenous technology in maize processing suitable in the context of Indian situation; and (vi) Dissemination of the R&D Technologies developed through demonstration programmes.

The indigenous technologies developed through R&D programmes were popularised by setting up demonstration units in industries with partial grant-in-aid assistance from the Department of Agriculture and Cooperation. The partial grant-in-aid assistance was provided in the form of plant and machinery. The scheme has been discontinued from 2005-06 by the Planning Commission.

Integrated Development of Tree Borne Oilseed by NOVOD Board : National Oilseed and Vegetable Oils Development (NOVOD) Board is exploring and augmenting the potential of Tree Borne Oilseeds (TBOs) in the country by undertaking activities like back-ended credit-linked subsidy programmes consisting of

establishment of seed procurement centres, installation of multi-purpose pre-processing and processing facilities, installation of oil expellers, nursery raising and commercial plantation and promotional programmes like development of elite planting material, elite nursery raising and plantation, awareness programmes, establishment of TBO garden, etc.

The Board has initiated plantation programmes of **Jatropha curcas**, and karanja **(Pongamia pinnata)** for bio-diesel production in the country in more than 10,000 ha. areas in the 25 States / Union Territories of the country. Besides 128 TBO gardens have also been established to demonstrate the silvicultural practices coupled with IPM for early adoption of TBO plantation in 12 States. Further, transfer of technology programmes consisting of 136 farmer's training, 48 trainer's training and 22 workshops have also been organised for motivating farmers to adopt TBO plantation and create awareness among primary seed collectors. The elite planting material and planting techniques as well as location specific package of practices are being evolved through a national network of 42 R&D institutions in the country.

Under the awareness programme, 2300 farmers have been trained and motivated for raising TBOs by conducting 46 farmer's training in the various States. Similarly, 600 field level functionary and volunteers have been trained through 12 trainer's training programme.

Eight oil expellers have been installed in the State of A.P., Bihar, Karnataka and Tamil Nadu. Six more oil expellers are being installed for extraction of oil from TBOs.

CROP PRODUCTION PROGRAMME

The Crop Development schemes, viz., (i) Integrated Cereal Development Programme in wheat-based cropping systems areas (ICDP-Wheat) (ii) Integrated Cereals Development Programme in rice-based cropping systems areas (ICDP-Rice); (iii) Integrated Cereal Development Programme on Coarse Cereals-Based Cropping Systems Areas (ICDP-Coarse Cereals), (iv)Sustainable Development of Sugarcane-Based Cropping System (SUBACS); and (v) Special Jute Development Programme (SJDP) implemented during Ninth plan have since been subsumed under Macro Management of Agriculture Scheme w.e.f. October 2000 to give more flexibility to the State Governments. Assistance is provided to the States for implementation of these programmes based on the Work Plans prepared by them according to regional needs.

The Centrally Sponsored Scheme of **Intensive Cotton Development Programme (ICDP) now modified as a Mini-Mission-II of the Technology Mission on Cotton**, is continuing during 2006-07. The scheme is being implemented in 13 States. The aim of the scheme is to increase the production and productivity of cotton. The scheme provides assistance for extension and development activities.

As a new initiative, a Centrally Sponsored Scheme – **On Farm Water Management** for encouraging crop production in Eastern India was launched in March 2002. The objective of the scheme was to increase the production and productivity of foodgrains through focus on exploitation of ground / surface water and its efficient utilisation. The scheme helps in enhancing the income of the farmers and diversifying agriculture production in eastern India. The Scheme was in operation in all districts of Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Jharkhand, Manipur, Mizoram, Orissa, nine districts of West Bengal and 35 districts of Eastern Uttar Pradesh. The main components of the scheme were: (i) assistance for installation of shallow tubewells with pump sets;(ii) assistance for electric / diesel pump sets; (iii) assistance for community lift irrigation points; and (iv) assistance for digging

wells in the plateau region. The scheme was being implemented as credit-linked back-ended subsidy basis through NABARD in coordination with the State Governments. The funding pattern of the scheme was 20:30:50 basis, i.e., 20 per cent contributed by the beneficiaries, 30 per cent subsidy from Government of India and 50 per cent as bank loan. The scheme has since been discontinued from 2006-07.

HORTICULTURE

India is bestowed with a varied agro-climate, which is highly favourable for growing a large number of horticultural crops such as fruits, vegetables, root tuber, ornamental, aromatic plants, medicinal herbs, spices and plantation crops like coconut, arecanut, cashew and cocoa. Presently, horticultural crops occupy around 10 per cent of gross cropped area of the country producing 160.75 million tonnes. India is the second largest producer of fruits and vegetables. Total production of fruits has been estimated at 49.36 million tonnes from 4.81 million ha. Vegetables occupy an area of 6.3 million ha. with a production of 93.00 million tonnes. Our share in world fruit and vegetable production is 10 per cent and 13.28 per cent respectively.

Fruits : India has a large range of varieties of fruit in its basket and accounts for 10 per cent of world's total fruit production. Mango, banana, citrus, pineapple, papaya, guava, cheeku, jackfruit, litchi and grape, among the tropical and sub-tropical fruits; apple, pear, peach, plum, apricot, almond and walnut among the temperate fruits and aonla, ber, pomegranate, annona, fig, phalsa among the arid zone fruits are important. India leads the world in the production of mango, banana, cheeku and acid lime and in productivity of grapes per unit land area.

India is the largest producer of mango, banana, cheeku and acid lime. About 39 per cent of world's mango and 23 per cent of world's banana is produced in the country. In grapes, India has recorded the highest productivity per unit area in the world. The overall production of horticultural crops registered an increase of 8.0 per cent during 2004-05 as compared to 2003-04. The per centage increase in fruit production has been to the tune of 1.5 per cent during the period.

Vegetables : More than 40 kinds of vegetables belonging to different groups, namely, solanaceous, cucurbitaceous, leguminous, cruciferous (cole crops), root crops and leafy vegetables are grown in India in tropical, sub-tropical and temperate regions. Important vegetable crops grown in the country are tomato, onion, brinjal, cabbage, cauliflower, okra and peas.

India is next only to China in area and production of vegetables and occupies prime position in the production of cauliflower, second in onion and third in cabbage in the world. The area and production of major vegetables during 2004-05 is estimated at 6.30 million ha with a production of 93.0 million tonnes and average productivity of 14.8 tonnes per ha. The production has increased by 5.7 per cent.

Flowers : Though flower cultivation has been practised in India since times immemorial, floriculture has blossomed into a viable business only in recent years. The increased growing of contemporary cut flowers like rose, gladiolus, tuberose, carnation, etc., has led to their use for bouquets and arrangements for gifts, as well as decoration of both home and work place. A growing market, as a result of improvement in the general level of well being in the country and increased affluence, particularly among the middle class, has led to transformation of the activity of flower growing into a burgeoning industry. Availability of diverse agro-climatic conditions in this large country facilitates production of all major flowers throughout the year in some

part or the other, and improved transportation facilities, have increased the availability of flowers all over the country.

India has made noticeable advancement in the production of flowers. Floriculture is estimated to cover an area of 1.14 lakh ha. with a production of 6,70,000 MT of loose flowers and 13009.3 million cut flowers.

Spices : Spices constitute an important group of horticultural crops and are defined as vegetable products or mixture thereof, free from extraneous matter, used for flavouring, seasoning and imparting aroma in foods. The term applies equally to the product in the whole form or in the ground form. India is known as the home of spices and produces a wide variety of spices like black pepper, cardamom (small and large) ginger, garlic, turmeric, chilli and a large variety of tree and seed spices.

India is the largest producer, consumer and exporter of spices and spice products. The total production of spices was 4.3 million metric tonnes and the area covered was 2.56 million hectares.

Plantation Crops : Plantation crops constitute a large group of crops. The major plantation crops include coconut, arecanut, oil palm, cashew, tea, coffee and rubber, the minor plantation crops include cocoa. Their total coverage is comparatively less and they are mostly confined to small holdings. However, they play an important role in view of their export potential as well as domestic requirements and in employment generation and poverty alleviation programmes particularly in rural sector.

India is also the largest producer and consumer of cashew nuts. It is estimated that total production of cashew is around 0.57 million tonnes from an area of 0.24 million hectares. The cultivation of vanilla in India started in 1990s and was confined mostly to Karnataka and Kerala and to a lesser extent in Tamil Nadu, Northeast region, Lakshadweep and the Andaman and Nicobar Islands. India's production of vanilla was about 101 Metric Tonnes from about 27,811 hectare in 2004-05. Coconut is grown in an area of 1.93 million ha. with a production of 12,148 million nuts and productivity of 6285 nuts per ha. India is the third largest producer of coconut and leads 90 coconut-producing countries of the world. It occupies a number one position in arecanut production. As a result, horticulture is not only an integral part of food and nutritional security, but also an essential ingredient of economic security.

Medicinal and Aromatic Plants : Medicinal and aromatic plants have been used in the country for a long time for their medicinal properties. About 2000 native plant species have curative properties and 1300 species are known for their aroma and flavour. The Indian systems of medicines, popularly known as Ayurveda, Unani and Siddha drugs are of great demand in the country. There is already a spurt in demand for plant-based drugs and lately many such native species of medicinal value are being brought under systematic cultivation.

India has been considered a treasure house of valuable medicinal and aromatic plant species. The Ministry of Environment and Forests, Government of India have identified and documented over 9,500 plant species considering their importance in the pharmaceutical industry. Out of these, about 65 plants have large and consistent demand in world trade. India however produces only limited quantities of these materials. In terms of market share in production value, India holds only the 6th place with a mere 7 per cent share. On the contrary, we are still importing about 10 types of essential oils to the tune of 8000 tonnes per annum.

PROGRAMMES FOR HORTICULTURE DEVELOPMENT

National Horticulture Mission : A Centrally Sponsored Scheme of National Horticulture Mission (NHM) has been launched in the country from May 2005 during the current financial year for the development of horticulture duly ensuring an end to end approach having backward and forward linkages covering research, production, post-harvest management, processing and marketing. The focus areas of the Mission will be as under:

- Capacity building for production and supply of adequate quality planting material including setting up of scion banks of high yielding mother plants.
- Increased coverage of crops under improved / high yielding cultivars.
- Enhanced production and productivity of horticulture crops.
- Strengthening of infrastructure facilities such as soil and leaf analysis labs, survey and surveillance of pest and diseases, green house, poly houses, micro irrigation, plant health clinics, vermicompost, etc.
- Building adequate infrastructure for on-farm and post-harvest handling.
- Enhanced production of high value and low volume horticultural products for exports.
- Strengthening infrastructure facilities for marketing and export.
- Enhanced production of high value processed products.
- Building a strong base to enhance efficiency in adoption of technologies.

A technology driven cluster approach with focussed attention on competitive horticulture crops, is the underlying approach of the National Horticulture Mission.

Technology Mission for Integrated Development of Horticulture in North Eastern States, Sikkim, Jammu and Kashmir, Himachal Pradesh and Uttaranchal : The Centrally Sponsored Scheme on Technology Mission for Integrated Development of Horticulture in North Eastern region including Sikkim was continued during the year. The implementation of the scheme has been extended to the States of J&K, Himachal Pradesh and Uttaranchal. The scheme aims at establishing convergence and synergy among numerous ongoing governmental programmes through horizontal and vertical integration of these programmes which will ensure adequate, appropriate, timely and concurrent attention to all the links in the production, post harvest and consumption chain. The Small Farmer's Agribusiness Consortium (SFAC) is involved in coordinating the scheme.

The Technology Mission through its four Mini Missions addresses all the aspects of Horticulture development with an end-to-end approach. Mini Mission-I involving research is coordinated and implemented by the Indian Council of Agricultural Research (ICAR). Mini Mission-II covering production and productivity improvement activities is coordinated by the Department of Agriculture and Cooperation and implemented by the Agriculture / Horticulture Departments of the States. Mini Mission-III involving post-harvest management, marketing and export is coordinated by National Horticulture Board and Mini Mission-IV involving processing is coordinated and implemented by the Ministry of Food Processing Industries. State level SFACs have also been constituted in most of the implementing States for monitoring and implementing the programme at the grass-root level. Under the Technology Mission, funds to the states are made available on the basis of yearly action plans / proposals,

which are approved by the State Level Steering Committee under the chairmanship of Chief Secretary of the concerned state.

Some of the major achievements made so far under the scheme are:

- 97503 hectares of additional area have been brought under different horticultural crops.
- The area covered under fruits, vegetables and spice crops are 50667 ha, 16252 ha and 20262 ha respectively.
- An area of 5858 ha has been covered under high value crops like medicinal and aromatic plants and flowers.
- Infrastructure facilities for production of quality planting material such as establishment of 420 nurseries, 3055 community water tanks, adoption of drip irrigation in 2121 ha were undertaken.
- IPM practices in 22140 ha and organic farming in 4498 ha. were taken up.
- Establishment of 304 markets (whole-sale markets-59, Rural Primary markets / Apni Mandies-225 and 20 Grading Labs) and 9 processing units are the other achievements.

Under this scheme, it is also envisaged to make women self-reliant by providing them equal opportunities, so that they are able to avail the benefits and opportunities of the existing agricultural systems through following interventions:

- Organisation / identification of women groups, which would act as a network for channelising the horticultural support.
- Need based assessment of women farmers in terms of the horticulture support such as input support, technological support and extension support, etc.
- Prioritising the activities of the individual women's groups on the basis of the need based assessment.
- Provide adequate organisational and financial support to women groups to make their "self-help groups."
- Provide technical training in horticulture and allied areas to women farmers.
- Provide training in increased managerial, organisational, entrepreneurial and decision making skills.
- Enable them to develop into viable bodies so that they are able to orchestrise their activities, resources and group interaction.
- Under the mission 17353 women entrepreneurs were trained, on different aspects of horticulture.

National Horticulture Board Programmes : The National Horticulture Board (NHB) is involved in the development of high quality horticulture farms in identified belts and make such areas vibrant with horticulture activity which in turn will act as hubs for developing commercial horticulture, development of post harvest infrastructure, strengthening of market information system and horticulture data base, assisting Research and Development programmes to develop products suited for specific varieties with improved methods and horticulture technology, providing training and education to farmers and processing industry personal for improvement of agronomic practices and new technologies are also being pursued by the Board.

Coconut Development Board Programmes : The Coconut Development Board (CDB) implements programmes for the Integrated Development of Coconut Industry

and Technology Mission on Coconut during the Tenth Plan period. To achieve the objectives of integrated development of the crop, product diversification and by-product utilisation, the major thrust areas identified are production and distribution of quality planting material, expansion of area under coconut especially in potential and non-traditional areas, improving productivity of coconut in major coconut producing states, developing of technology in post harvest processing, marketing activities and the integrated control of major pests and diseases. Interventions by the CDB has enabled to diversify coconut products like desiccated coconut, coconut vinegar, virgin coconut oil and defatted coconut kernel products for enabling value addition and higher remuneration to the farmers.

Bee-Keeping : In order to maximise agricultural production, honeybee can be used as an important input. About 85 per cent crop plants are cross-pollinated, as they need to receive pollen from other plants of the same species with the help of external agents. One of the most important external agent is the honeybee. A few colonies of honeybees are placed in the field when the crop is in flowering stage. When pressed into service they would make several thousand forages for pollination. The abundance of pollinators helps in early setting of seeds resulting in early and more uniform crop yield. Honeybees also produce honey, bee wax and royal jelly thus giving additional benefits to the farmers. About 50 million ha. of land in the country are under bee dependent crops like fruit, vegetables, oilseeds, legumes and pulses. Many of these crops require three to nine bee colonies per ha.

The National Bee Board which is looking after the developmental activities of bee keeping has been recently reconstituted with Secretary (A&C) as Chairman and Horticulture Commissioner as Member Secretary.

NEW SCHEMES

Micro Irrigation : To enable judicious use of the water and available resources, a new scheme on Micro Irrigation was launched during the Tenth Plan with a target to bring 6.2 lakh ha. under micro irrigation. A good response by the farmers in adopting efficient methods of irrigation like micro irrigation, has helped in conserving water with added benefits of increased yield and improved quality, particularly of horticultural crops. Since there is a need to promote this technology in all parts of the country, a Centrally Sponsored Scheme on Micro Irrigation has been launched by the Department of Agriculture and Cooperation with the approval of Cabinet on 29 December 2005.

National Bamboo Mission : A report on "National Mission on Bamboo Technology and Trade Development (NMBTTD)" have been prepared for launching of the National Bamboo Mission programme during Tenth Plan. This mission would bring about one lakh hectares under bamboo which is expected to generate income and employment opportunity through bamboo and its ancillary industry. The scheme envisages harnessing the bamboo wealth in the country by integrating the production, post-felling management, value addition and marketing aspects. The scheme is proposed to be implemented through State Bamboo Development Agencies, to be constituted by the States. The scheme is in the final stage of approval.

MACRO MANAGEMENT OF AGRICULTURE

Agriculture being a State subject, the primary responsibility for increasing agriculture production, enhancing productivity and exploring the vast untapped potential of the sector rests with State Governments. However, in order to supplement the efforts

of State Governments, a number of Centrally Sponsored and Central Sector Schemes are being implemented as a catalyst for enhancement of agricultural production and productivity in the country, and consequential increase in prosperity of the farming community.

The Macro Management of Agriculture (MMA) Scheme is a Centrally Sponsored Scheme formulated with the objective to ensure that the Central Assistance is spent on focused and specific interventions for development of agriculture in areas of priority of different States. It became operational in 2000-01 in all States and UTs. The Scheme provides sufficient flexibility to States to develop and pursue the programmes on the basis of their regional priorities. Thus States have been given a free hand to finalise their sector-wise allocation as per requirements of their developmental priorities. It is a major step towards achieving decentralisation in pursuance of restoring primacy of States in agricultural development planning which aims at development in agriculture through Work Plans prepared by State Governments themselves.

The scheme initially consisted of 27 Centrally Sponsored Schemes relating to Cooperative, Crop Production Programmes (for rice, wheat, coarse cereals, jute, sugarcane) Watershed Development Programme (NWDPRA, RVP / FPR), Horticulture, Fertiliser, Mechanisation and Seeds Production Programme. However, with the launching of National Horticulture Mission (NHM), 10 schemes pertaining to horticulture development were taken out of the purview of this Scheme from the year 2005-06.

The approved pattern of Assistance under the Scheme is in the ratio of 90:10 between the Centre and the States respectively, except in the case of North Eastern States in case of which 100 per cent Central Assistance is extended. The Central Assistance to the States is released in two installments in the ratio of 80 per cent Grant and 20 per cent Loan.

The position regarding Budget Estimates, Revised Estimates and expenditure incurred under the scheme since 2000-01 is as indicated below:-

(Rs in Crore)

Year	Budget Estimate	Revised Estimate	Expenditure
2000-01	490.00	381.88	381.88
2001-02	850.00	680.49	678.62
2002-03	736.86	597.00	597.59
2003-04	700.00	648.60	648.49
2004-05	712.92	1189.20	1188.94
2005-06	912.62	819.15	841.86
2006-07	910.00	819.15	841.86

An amount of Rs 910.00 crore has been earmarked in BE 2006-07 for implementation of this Scheme.

NATURAL RESOURCES MANAGEMENT

Soil and water conservation measures are one of the essential inputs for increasing agricultural output in the country. These programmes were first launched during the First Plan. From the very beginning, the emphasis has been on development of technology for problem identification, enactment of appropriate legislation and constitution of policy coordination bodies. While conceptual framework of soil and

water conservation activities has been changed, concept of programmes has undergone considerable revision during successive Five- Year Plans.

The Centrally-Sponsored Scheme of Soil Conservation in the catchments of River Valley Project (RVP) was started in the Third Five-Year Plan. Subsequently, another scheme of Flood Prone Rivers (FPR) was started in the Sixth Five-Year Plan keeping in view the magnitude of floods in 1978. Both the schemes were clubbed together during the Ninth Five-Year Plan on recommendation of Expenditure Finance Committee and were subsumed under Macro Management Mode since November 2000. Under the programme for the Catchment Management of River Valley Projects and Flood Prone Rivers, 53 Catchments are covered, spread over in 27 States. The total Catchment area is 141 million ha. with Priority Area needing urgent treatment in 28 million ha. Out of this 6.08 million. ha. have been treated till 2004-05 with an expenditure of Rs 1894 crore. During 2005-06 an area of 0.17 million ha. have been treated with an expenditure of Rs 145 crore.

A Centrally-Sponsored Scheme of Reclamation of Alkali Soil was taken up in Punjab, Haryana and Uttar Pradesh during the Seventh Five Year Plan. During the Ninth Plan, extension of the Scheme to all other States of India was approved where alkali soil problems exist as per scientific parameters. The Scheme aims at improving physical conditions and productivity status of alkali soils for restoring optimum crop production. The major components of the scheme include, assured irrigation water on farm development works like land leveling, bunding and ploughing, agriculture, community drainage system, application of soil amendment organic manures, etc. An area of 0.66 million ha out of 3.5 million ha., of alkali land has been reclaimed till the end of 2004-05 in the country. The Scheme at present stands subsumed within the Macro Management Scheme. During 2005-06 an area of 0.03 million ha have been reclaimed with an expenditure of Rs 9.29 crore.

The Scheme of Watershed Development Project in Shifting Cultivation Areas was launched in seven North–Eastern States during the Eighth Plan from 1994-95 with 100 per cent Central assistance to the State Plan. The Scheme aims at overall development of jhum areas on watershed basis. During the Eighth Plan an amount of Rs 31.51 crore was spent by the States of north-east region and 0.67 lakh ha. area was treated through treatment packages. During the Ninth Plan, 1.57 lakh ha. have been treated with an expenditure of Rs 82 crore. The new guidelines of the scheme on the basis of new watershed to common approach has been effective from November 2000 in the revised cost norms of Rs 10,000 per ha. on net treatable area basis with additional activities and improved institutional mechanism. During the Tenth Plan, an area of 0.89 lakh ha. has been treated with an expenditure of Rs 88.32 crore up to end of 2005-06.

RAINFED FARMING

Rainfed Farming is complex, diverse and risk prone and is characterised by low levels of productivity and low input uses. The Government of India has accorded high priority to the holistic and sustainable development of rainfed areas through integrated watershed development approach. The key attributes of the watershed approach are conservation of rain water and optimisation of soil and water resources in a sustainable and cost-effective mode. Improved moisture management increases the productivity of improved seeds and fertiliser. So conservation and productivity enhancing measures become complementary.

Graphs

A National Watershed Development Project for Rainfed Area (NWDPRA) was launched in 1990-91 in 25 states and two UTs. The project was continued during Tenth Five Year Plan in 28 states inclusive of three newly created States and two UTs with the purpose of increasing agriculture productivity and production in rainfed areas. The guidelines for NWDPRA have been radically restructured by retaining the technical strength and incorporating community participation. The watershed development programme is now planned, implemented, monitored and maintained by watershed communities. During Ninth plan, an area of 27.66 lakh ha has been treated. Now the scheme of NWDPRA has been subsumed within the Macro Management of Agriculture scheme. The scheme is being continued for implementation during Tenth plan under the revised guidelines, with people's participation, covering more than 6000 micro-watersheds. It is estimated that an area of about 20 lakh ha would be developed during Tenth plan. In the first four years of Tenth Plan, an area of 1.59 million hectares has been developed at an expenditure of Rs. 793.82 crore.

A Watershed Development Fund (WDF) has been established at NABARD with the objective of integrated watershed development in 100 priority districts of 18 States through participatory approach. The total corpus of WDF is Rs 200 crore. Under WDF, two-thirds of amount is given for loan based project and one-third of amount is given for grant based project in the State. A number of externally aided projects are also under implementation on watershed approach, which covers an area of about 1.5 lakh hectares annually.

INTEGRATED NUTRIENT MANAGEMENT

The main objective of Integrated Nutrient Management (INM) Division is to ensure adequate availability of quality fertilisers to farmers through periodical demand assessment and timely supply, promoting integrated nutrient management, which is soil test-based, judicious and balanced use of chemical fertilisers in conjunction with organic manures and bio-fertilisers, promotion of organic farming and ensuring quality control of fertilisers through implementation of Fertiliser (Control) Order, 1985.

India is the third largest producer and consumer of fertilisers in the world after China and the USA. Against 18.4 million tonnes of fertiliser nutrients (NPK) consumed during 2004-05, the nutrient consumption is estimated at 20.2 million tonnes during 2005-06. The consumption of major fertilisers namely, Urea, DAP, MOP, SSP and Complexes was estimated to be 22.2, 6.8, 2.6, 2.8 and 6.7 million tonnes respectively during 2005-06. India is, by and large, self sufficient in respect of Urea and about 90 per cent in case of DAP. The all-India average fertiliser consumption is 96.4 kg./ha of NPK nutrients though there is wide variation from state to state varying from 197 kg./ha in Punjab, 164 kg./ha in Haryana to less than 10 kg./ha in States like Arunachal Pradesh, Nagaland, Sikkim,etc. Considering the skewed pattern of fertiliser use, Government of India is promoting balanced and integrated use of fertiliser nutrients through various initiatives. As a result, NPK consumption ratio has now improved to 5.7: 2.2: 1 during 2004-05 from 7: 2.7: 1 during 2000-01.

Price of fertilisers: Presently urea is the only fertiliser which is under Statutory Price Control. To ensure adequate availability of fertilisers to farmers at reasonable rates, subsidy is provided by Government of India. Urea, the most consumed fertiliser, is subsidised under the New Urea Pricing Scheme, whereas P&K fertilisers, which are decontrolled, are covered under the Concession Scheme. The existing scheme for special freight subsidy has been continued for supplies to the North Eastern States

and Jammu and Kashmir. There is no change in the prices of major fertilisers level since 12 March 2003, which are as under:

Fertilizer Product	MRP (Rs. per MT)
Urea	4830
DAP (Indigenous)	9350
Complexes	7100-9080
MOP	4455
SSP	Price of SSP is fixed by State Governments.

Buffer Stocking of P&K Fertilisers : To ensure adequate availability of decontrolled fertilisers in remote and inaccessible areas, there is a scheme under which a buffer stock of limited quantities of DAP and MOP is being maintained at strategic locations to meet emergent requirements.

Balanced Use of Fertilisers : The Government is implementing a Centrally Sponsored Scheme 'Balanced and Integrated Use of Fertilisers' to popularise soil test based judicious application of chemical fertilisers in combination with organic manures and bio-fertilisers. Under the Scheme, financial assistance is provided for setting up / strengthening of new soil testing laboratories for advising farmers on major and micro nutrients application, training and demonstration on balanced use of fertilisers and also for setting up of production units of useful organic manure from city waste / garbage. This scheme has since been subsumed within 'Macro Management Scheme' with effect from October 2000. State Governments are required to undertake all these activities through their Annual Work Plans.

FERTILISER QUALITY CONTROL

The Government ensures the quality of fertilisers through Fertiliser (Control) Order (FCO) issued under Essential Commodities Act (ECA) to regulate the price, trade, quality and distribution of fertilisers in the country. The State Governments are the executing agencies to implement the various provisions of FCO. The Order strictly prohibits the manufacture, import and sale of any fertiliser, which does not meet prescribed standards. The Central Fertiliser Quality Control and Training Institute at Faridabad and its 3 Regional centres located at Navi Mumbai, Chennai and Kalyani have been set up for inspection and analysis of imported and indigenous fertilisers, giving technical advice and providing training on quality control to state enforcement agencies and analysts. The Institute has also developed a Quick Testing Kit for on-the-spot detection of adulteration in fertilisers.

The FCO has been recently amended to make it more user friendly and ensuring effective enforcement. The important amendments include provision of repackaging of cut or torn fertiliser bags and reprocessing of damaged fertiliser due to natural calamities and provisions for commercial trials of provisional fertilisers. Accordingly, M / s National Fertiliser Limited (NFL), M / s Tata Chemicals, M / s Chambal Fertilisers Ltd., M / s Indo-Gulf Fertilisers and M / s Shri Ram Fertilisers have been permitted to manufacture neem-coated urea under Clause 20 A for commercial trials. M / s Coromandel Fertilisers Ltd. have been permitted to manufacture Bentonite Sulphur for commercial trials and M / s IFFCO has been permitted to manufacture fortified

complex fertilisers. Printing of Maximum Retail Price (MRP) on all fertilisers including urea is now mandatory along with the printing of month and year of manufacture / import of fertiliser.

Presently there are 67 laboratories in the country (including 4 Central Government Laboratories) with a total annual analysing capacity of 1.25 lakh samples. The analytical capacity and the number of samples analysed and found non standard during the last 5 years are as under:

Year	No. of Labs.	Annual Analytical capacity	No. of samples analysed	Per centage of non standard samples
2000-01	66	120315	103436	5.3
2001-02	66	120415	104188	5.7
2002-03	67	125480	109504	5.4
2003-04	67	124778	104647	5.5
2004-05	67	124730	108859	6.0

The per centage of non standard samples on all India basis is hovering around 5 - 6 per cent samples during the last 5 years. However, there is a large variation from state to state like 18 per cent in M.P., 10 to 13 per cent in Maharashtra, HP and UP, 4 to 8 per cent in Bihar, Orissa, W.B., Rajasthan, Haryana, Chhattisgarh, A.P., Kerala, Karnataka and Tamil Nadu and around 1 to 3 per cent in Punjab and Gujarat.

PROMOTION OF BIO-FERTILISERS

With a view to promote the use of bio-fertilisers as an environment-friendly and cheaper source of plant nutrients, Government of India had earlier taken up a 'National Project on Development and Use of Bio fertilisers' during the Sixth Plan and was continued till Ninth Plan. The Scheme provided for setting up National Bio-fertiliser Development Centre at Ghaziabad and its Six Regional Bio-fertiliser Development Centres (RBDCs) at Jabalpur, Nagpur, Bangalore, Bhubaneswar, Hissar and Imphal for promotion, extension, training and demonstration of bio-fertilisers. Under the Scheme, assistance for setting up of bio-fertiliser production units was also provided. Presently, there are around 125 bio-fertilisers production units in the country with an annual capacity of 18,000 tonnes of different types of bio-fertilisers and the annual production is about 10,000 tonnes. This scheme has been subsumed under a new Central Sector Scheme "National Project on Organic Farming" from October 2004. To undertake the new activities, the names of NBDC and RBDCs have been changed to National Centre of Organic Farming (NCOF) and Regional Centres of Organic Farming (RCOF).

NATIONAL PROJECT ON ORGANIC FARMING

The Government is implementing a new scheme 'National Project on Organic Farming' since October 2004 with an outlay of Rs 57.05 crore for production, promotion, market development of organic farming in the country during the remaining period of the Tenth Plan. The main components of the scheme include:

(i) Putting in place a system of certification of organic produce.

(ii) Capacity building through service providers.

(iii) Financial support for commercial production units for production of organic

inputs like: (a) fruits and vegetable waste compost units; (b) bio- fertilisers production; and (c) hatcheries for vermi culture.

(iv) Promotion, extension and market development of Organic Farming.

PLANT PROTECTION

Plant Protection continues to play a significant role in achieving targets of crop production. The major thrust areas of plant protection are promotion of Integrated Pest Management, ensuring availability of safe and quality pesticides for sustaining crop production from the ravages of pests and diseases, streamlining the quarantine measures for accelerating the introduction of new high yielding crop varieties, besides eliminating the chances of entry of exotic pests and for human resource development including empowerment of women in plant protection skills.

The following three Plan Schemes are being implemented by Plant Protection Division of the Department of Agriculture and Cooperation through Directorate of Plant Protection, Quarantine and Storage

STRENGTHENING AND MODERNISATION OF PEST MANAGEMENT APPROACH IN INDIA

Components :

A. Promotion of Integrated Pest Management (IPM)

B. Locust Control and Research

C. Training in Plant Protection

D. Implementation of Insecticides Act

On the recommendation of Planning Commission the Schemes at A to D have been merged as a single scheme i.e. "Strengthening and Modernisation of Pest Management Approach in India" with a total outlay of Rs. 99.95 crore during Tenth Five year Plan (2002-2007).

(A) Promotion of Integrated Pest Management : Keeping in view the ill effects of chemical pesticides such as development of pest resistance, pest resurgence, outbreak of secondary pests, pesticide residues in food, fodder, soil, air and water resulting in human health hazards and ecological imbalances, Government of India has adopted Integrated Pest Management (IPM) as the cardinal principle and main plank of plant protection strategy in the country. IPM is an eco-friendly approach aimed at minimum use of chemical pesticides by employing available alternative methods for pest control like cultural, mechanical and biological and use of bio-pesticides.

To enhance the production of bio-control agents / bio-pesticides, Government of India earmarked Rs 1500 lakh as grants-in-aid during the Eighth and Ninth Plans for establishment of 29 State Bio-control Laboratories of which an amount of Rs 1372 lakh has been released to States. During the Tenth Plan, an amount of Rs 470 lakh has been approved of which Rs 405 lakh has already been released so far for the said purpose.

With the adoption of IPM approach, consumption of pesticides has come down from 72,133 MT (technical grade) during 1991-92 to 40,672 MT (technical grade) during 2004-05 and there is consistent increase in use of bio-pesticides which are environmentally safe. In some of the States, farmers have stopped using chemical pesticides and have adopted organic farming.

(B) Locust Control and Research: The Locust Warning Organisation, Jodhpur with

its 10 Locust circle offices and 1 Field Station monitors two lakh sq. km., Scheduled Desert Area in Rajasthan, Gujarat and Haryana for locust surveillance and control. During 2005-06, an area of 150 lakh hectares has been surveyed and 24 locust bulletins have been issued. Close liaison is being maintained with other locust prone countries and the FAO to keep watch over possible locust invasion. The 24th Session of FAO Commission for Controlling the Desert Locust in South West Asia was held in New Delhi from 10-14 January 2005. During the year 2005-06, 7 Indo-Pak Border Meetings were conducted with the officers of Pakistan.

(C) Training in Plant Protection: Until 1966, there was no national training facility in India to cater to the needs of the States. To bridge this gap, the National Plant Protection Training Institute was established in 1966 at Hyderabad (Andhra Pradesh). The Institute has been recognised as a Regional Training Centre for Plant Protection by Food and Agricultural Organisation of the United Nations and also as an Advanced Centre for training in Plant Protection Technology by the World Bank. The Institute has conducted 912 courses and trained 16,747 officers / officials including 216 foreign trainees up to 2005-06.

(D) Implementation of Insecticides Act : Pesticides are commonly used in crop protection measures for sustaining food production. These are also used for the control of vector-borne diseases. As they are meant for killing insect pests they are toxic by their nature. Their misuse or abuse results in hazards to human beings, animals and the environment. Therefore, pesticides are required to be used safely and judiciously. Keeping this in view, their import, manufacture, sale and use, etc., are being regulated under the Insecticides Act, 1968 and the Rules framed thereunder. The provisions of the Act ensure the availability of safe, effective and quality pesticides to the farmers.

The Central Government has constituted the Central Insecticides Board under Section 4 of the Insecticides Act, 1968 to advise the Central and State Governments on technical matters arising out of the administration of this Act. The Director General, Health Services is the Chairman with 29 members. The Central Government has constituted a Registration Committee to register pesticides after examining their formulae verifying their efficacy and safety to human beings, animals and environment.

The Government of India has also set up a Central Insecticides Laboratory with the major objectives of pre and post-registration verification of the properties, performance and hazards of pesticides and the proposed use claimed by the manufacturers. To supplement the resources of the States / UTs in the analysis of pesticides, two Regional Pesticides Testing Laboratories have also been set up at Chandigarh and Kanpur with an analysis capacity of 900 samples per annum each.

Plant Quarantine Facilities in India : Plant Quarantine regulatory measures are operative through the **'Destructive Insects & Pests Act, 1914 (Act 2 of 1914)'** in the country. The purpose and intent of this Act is to prevent the introduction of any insect, fungus or other pest, which is or may be destructive to crops. The import of agricultural commodities is presently regulated through the Plant Quarantine (Regulation of Import into India) Order, 2003 issued under DIP Act, 1914 incorporating the provisions of New Policy on Seed Development, 1988. Further, the significance of Plant Quarantine has increased in view of Globalisation and liberalisation in International trade of plants and plant material in the wake of Sanitary and Phytosanitary (SPS) Agreement under WTO. The phytosanitary certification of

agricultural commodities being exported is also undertaken through the scheme as per International Plant Protection Convention (IPPC), 1951.

The primary objectives of the Scheme are (i) to prevent the introduction and spread of exotic pests that are destructive to crops by regulating / restricting the import of plants / plant products and (ii) to facilitate safe global trade in agriculture by assisting the producers and exporters by providing a technically competent and reliable phytosanitary certificate system to meet the requirements of trading partners.

The major activities under the scheme include;

- Inspection of imported agricultural commodities for preventing the introduction of exotic pests and diseases inimical to Indian Fauna and Flora
- Inspection of agricultural commodities meant for export as per the requirements of importing countries under International Plant Protection Convention (IPPC)
- Detection of exotic pests and diseases already introduced for containing / controlling them by adopting domestic quarantine regulations.
- Undertaking Post Entry Quarantine Inspection in respect of identified planting materials.
- Conducting the Pest Risk Analysis (PRA) to finalise phytosanitary requirements for import of plant / plant material.

There are 35 Plant quarantine Stations at different Airports, Seaports and Land frontiers implementing the Plant Quarantine regulations. The NPQS, New Delhi and RPQSs at Chennai, Kolkata, Amritsar and Mumbai have been strengthened with modern equipment for plant quarantine testing, etc., to facilitate speedy clearance of imports and exports under the FAO-UNDP Project.

The Sanitary and Phytosanitary Agreement of WTO envisages application of Phytosanitary measures based on scientific justifications therefore it is imperative to conduct all Plant Quarantine inspections as per the International Standards / guidelines. Accordingly, the National Standards for Phytosanitary Measures for some of the important activities have already been developed and adopted including the Guidelines for Development of National Standards for Phytosanitary Measures and six draft National Standards are under the process of approval. The Standards which are critical for our exports have been prioritised. Further, a National Integrated Fruit Fly Surveillance Programme has also been prepared with a view to establish pest-free areas against fruit flies. To streamline the Plant Quarantine activities, efforts are being made to computerise the Plant Quarantine Stations for speedy and transparent functioning.

Substantial efforts have also been made towards the international cooperation on the phytosanitary matters including participation in IPPC Standard Committee meetings for development of International Standards for Phytosanitary Measures, Training of fumigation service providers and regulators in methyl bromide fumigation under the Australian Fumigation Accreditation Scheme, finalisation of SPS Protocol for export of mango to China, harmonisation of phytosanitary measures with reference to Seed trade through the Workshops organised by Asia Pacific Seed Association (APSA), negotiations on free trade agreement with Thailand and Singapore, Memorandum of Understanding and work plan with Chile for cooperation on Phytosanitary matters and Indo-Nepal Joint trade and economic development negotiations.

Monitoring of Pesticide Residues : The subject “Monitoring of Pesticide Residues”

has been allocated to the Department of Agriculture and Cooperation by the Cabinet Secretariat. Monitoring of pesticide residues at the national level is essential to ensure food safety in the country. Further, it is essential to ensure that our export consignments are not rejected due to presence of pesticide residues. The Scheme has been approved with an outlay of Rs 24 crore during the Tenth Plan.

AGRICULTURAL MECHANISATION

Strategies and programmes have been directed towards replacement of traditional and inefficient implements by improved ones, enabling the farmers to own tractors, power tillers, harvesters and other machines, availability of custom services, support services of human resource development, testing and evaluation and research and development. A large industrial base for manufacturing of the agricultural machines has also been developed. Introduction of technologically advanced equipments through extension and demonstration besides institutional credit has also been taken up. Equipments for resource conservation have also been adopted by the farmers.

Under various Government sponsored schemes like Macro Management of Agriculture, Technology Mission for Oilseeds, Pulses and Maize, Technology Mission on Horticulture and Technology Mission on Cotton, financial assistance is provided to the farmers for the purchase of identified agricultural implements and machines.

Farm Machinery Training and Testing Institutes : Farm Machinery Training and Testing Institutes (FMTandTIs) have been established at Budni (Madhya Pradesh), Hissar (Haryana), Garladinne (Andhra Pradesh) and at Biswanath Chariali (Assam). The institutes have the capacity to train 5,000 personnel annually on various aspects of agricultural mechanisation. These institutes also undertake testing and performance evaluation of agricultural machines including tractors in accordance with national and international standards. Since inception about 93,503 personnel have been trained and about 2,162 machines tested by these Institutes till 31 March 2006. During 2005-06 these Institutes have trained 5734 personnel and tested 112 machines. The training programmes have been revised for giving more emphasis on crop / area / technology specific issues for optimised training duration for their implementation through Farm Machinery Training and Testing Institutes w.e.f. 1 April 2005.

Outsourcing of Training : This is a new component approved for the Tenth Plan under the Central Sector Scheme "Promotion and Strengthening of Agricultural Mechanisation through Training, Testing and Demonstration" in order to train large number of farmers at nearby places. The training programme shall be arranged through the identified institutions by each State namely State Agricultural Universities (SAUs), Agricultural Engineering Colleges / Polytechnics, etc. This Department has released Rs 73 lakh during the year 2004-05 and Rs 38.03 lakh during the year 2005-06 to various State Governments and ICAR for conducting training programmes at the identified institutions. For the year 2006-07, a target to train 3000 farmers has been kept.

State Agro Industries Corporation : Seventeen State Agro Industries Corporations, Joint Sector Companies, have been promoted by the Government of India and by the State Governments concerned. The objectives of these Corporations envisage manufacture and distribution of agricultural machines, distribution of agri-inputs, promotion and execution of agro based industries and providing technical services and guidance to the farmers and others. The Government of India's share in Six State Agro Industries Corporations viz. Tamil Nadu, Karnataka, Rajasthan, Gujarat, Uttar

Pradesh and West Bengal have been disinvested in favour of the respective State Governments.

Legislative Framework : The Dangerous Machines (Regulation) Act, 1983, came into force with effect from 14 December 1983. The Act provides for the regulation of trade and commerce and production, supply and use of products of any industry producing dangerous machines with a view to securing the welfare of persons operating any machine and for payment of compensation for death or bodily injury suffered while operating any such machine. Power threshers used for threshing of the agricultural crops have been brought under the ambit of this Act. The Government of India have notified the Dangerous Machines (Regulation) Rule, 1985 laying down the specifications for the feeding chutes and for installation of the power threshers. Apart from power threshers the inclusion of power operated chaff-cutter and sugarcane crusher under this Act is in process.

Demonstration of newly developed agricultural / horticultural equipments : With an objective of introducing new technology in agricultural production system, demonstration of newly developed / improved agricultural and horticultural equipments has been approved from the year 1999-2000 which now forms a component of the restructured Central Sector Scheme "Promotion and Strengthening of Agricultural Mechanisation through Training, Testing and Demonstration". Under this component, 100 per cent Central grant-in-aid is provided to implementing agencies for procurement and demonstration of new / improved equipments. The Scheme is implemented through State / Central Government organisations. This component has helped in adoption of new agricultural / horticultural equipments by the farmers. During 2005-06, 8099 demonstrations of different new equipments were conducted benefiting 3,06,798 farmers. During 2006-07, 1500 such demonstrations will be conducted through the implementing agencies.

EXTENSION ACTIVITIES

Agricultural Extension aims at improving technology dissemination of farm technologies to the farmers. The Extension System has undergone several changes over a period, in terms of content and delivery approaches. Agricultural Extension is a State subject, however, the Ministry of Agriculture supplements States' efforts in improving extension services.

The Department of Agriculture and Cooperation lays down major policy guidelines on extension matters and the Directorate of Extension implements specific programmes and activities in close collaboration with the State Departments of Agriculture, the State Agricultural Universities and other concerned agencies.

Current efforts in improving extension services include the following:

- Providing innovative and decentralised institutional arrangements in the form of an Agriculture-Technology Management Agency (ATMA) to make extension system farmer-driven and farmer accountable;
- Encouraging Public Private Partnership (PPP) in various modes / forms can provide synergistic approach in the extension efforts;
- Augmentation of Mass Media Support to Agriculture Extension by providing for location-specific broadcasts through 96FM stations of All India Radio, 180 Low Powered / High Powered Transmitters, 18 Regional Kendras of Doordarshan and also on DD National Channel for 30 minutes, 5/6 days a week;

- Operation of Kisan Call Centres through toll free(1551) lines throughout the country to provide expert advise to farmers from 6.00 am to 10.00 pm on all 7 days of the week. The replies to the queries of the farming community are being given in 21 languages;
- Providing fee-based advisory and other support services to the farmers by training agriculture graduates in agri-business development and establishing agri-clinics.
- Mainstreaming gender concerns in agricultural policies and programmes.

SEEDS

Seed is a critical and basic input for enhancing agricultural production and productivity in different agro-climatic regions. Indian seed programme largely adheres to the limited generation system for seed multiplication. The system recognises three generations, namely, breeder, foundation and certified seeds and provides adequate safeguards for quality assurance in the seed multiplication chain to maintain the purity of variety as it flows from the breeders to the farmers. The level of certified / quality seed distributed to the farmers since 2000-01 is given below:

(in lakh quintals)

Year	Certified / quality seed distribution (in lakh quintals)
2000-01	86.27
2001-02	91.80
2002-03	98.03
2003-04	108.39
2004-05	113.01
2005-06	118.52(Anticipated)
2006-07	149.63(Targeted)

Indian seed programme includes the participation of Central and State governments, Indian Council of Agricultural Research (ICAR), State Agricultural Universities (SAU) system, public sector, co-operative sector and private sector institutions. Seed sector in India consists of two national level corporations i.e. National Seeds Corporation (NSC) and State Farms Corporation of India (SFCI), 13 State Seed Corporations (SSCs) and about 100 major seed companies. For quality control and certification, there are 22 State Seed Certification Agencies (SSCAs) and 101 State Seed Testing Laboratories (SSTLs). The private sector has started to play a significant role in the production and distribution of seeds. However, the organised seed sector particularly for food crops cereals continues to be dominated by the public sector.

Legislative framework and policy: The Seeds Act, 1966 provides for the legislative framework for regulation of quality of seeds sold in the country. The Central Seed Committee (CSC) and the Central Seed Certification Board (CSCB) are apex agencies set up under the Act to deal with all matters relating to administration of the Act and quality control of seeds. The proposed Seeds Bill, 2004 in replacement of the Seeds Act, 1966 was introduced in the Parliament in December 2004 and is currently under consideration of the Parliamentary Standing Committee on Agriculture.

In order to encourage export of seeds in the interest of farmers, the procedure for

export of seeds has been simplified. Seeds of various crops have been placed under Open General Licence (OGL) except the seeds of wild varieties, germplasms, breeder seeds, and onion seeds which are on restricted list under the new Export and Import Policy 2002-07.

Schemes of the Seed Division : (i) This Department has launched a Central Sector Scheme namely, **"Development and Strengthening of Infrastructure Facilities for Production and Distribution of Quality Seeds"** with an outlay of Rs.159 crore for the Tenth Plan. The main components of the scheme are Quality Control Arrangements on seeds, Transport subsidy on movement of seeds to North-East and other hilly areas, Establishment and Maintenance of Seed Bank, Seed Village Scheme, Assistance for creation of infrastructure facilities, Assistance for boosting seed production in private sector, Human Resources Development, Assistance for Seed Export, Propagation of application of biotechnology in agriculture, Promotion of use of hybrid seeds of rice and evaluation / review.

(ii) **Implementation of Plant Varieties Protection and Farmers' Rights Legislation:** In order to fulfill the obligations under TRIPS Agreement of the World Trade Organisation (WTO), which India has ratified, the Department of Agriculture and Cooperation have enacted a legislation for Protection of Plant Varieties and Farmers' Rights. In order to provide necessary back-up support for enactment of the above Legislation, a Central Scheme is also under implementation. The required rules and regulations under the Plant Varieties and Farmers' Rights Act have been notified in 2003. The Protection and Plant Varieties and Farmers' Rights Authority envisaged under the Act has been set up w.e.f. 14 November 2005.

AGRICULTURAL MARKETING

Organised marketing of agricultural commodities has been promoted in the country through a network of regulated markets. Most of the State governments and Union Territories have enacted legislations (APMC Act) to provide for regulation of agricultural produce markets. While by the end of 1950, there were 286 regulated markets in the country, today the number stands at 7,521 (31.3.2005). Besides, the country has 27,294 rural periodical markets, about 15 per cent of which function under the ambit of regulation. The advent of regulated markets has helped in mitigating the market handicaps of producers / sellers at the wholesale assembling level. but, the rural periodic markets in general, and the tribal markets in particular, remained out of its developmental ambit.

Agriculture sector needs well functioning markets to drive growth, employment and economic prosperity in rural areas of the country. In order to inject dynamism and efficiency into the marketing system, large investments are required for the development of post-harvest and cold chain infrastructure nearer to the farmers' field. A major portion of this investment is expected from the private sector, for which an appropriate regulatory and policy environment is necessary. Alongside, enabling policies need to be put in place to encourage procurement of agricultural commodities directly from farmers' field and to establish effective linkage between the farm production and the retail chain and food processing industries. Accordingly, amendment to the State APMC Act for deregulation of marketing system in the country is suggested to promote investment in marketing infrastructure, motivating corporate sector to undertake direct marketing and to facilitate a national integrated market.

The Ministry of Agriculture formulated a model law on agricultural marketing for guidance and adoption by State Governments. The model legislation provides for

establishment of Private Markets / Yards, Direct Purchase Centres, Consumer / Farmers Markets for direct sale and promotion of Public Private Partnership in the management and development of agricultural markets in the country. Provision has also been made in the Act for constitution of State Agricultural Produce Marketing Standards Bureau for promotion of Grading, Standardisation and Quality Certification of agricultural produce. This would facilitate pledge financing, direct purchasing, forward / future trading and exports. Several States have initiated steps for amending the APMC Act.

Infrastructure Requirement : Investment requirement for the development of marketing, storage and cold storage infrastructure in the country has been estimated to be huge and with a view to induce investment in the development of marketing infrastructure as envisaged above, the Ministry has implemented the following Plan Schemes:

i) A capital investment subsidy scheme titled **'Construction of Rural Godowns**' is being implemented w.e.f. 1 April 2001. The main objectives of the scheme include creation of scientific storage capacity with allied facilities in rural areas to meet various requirements of farmers for storing farm produce, processed farm produce, agricultural inputs, etc., and prevention of distress sale by creating the facility of pledge loan and marketing credit. Under the original scheme, back ended subsidy @ 25 per cent of capital cost of the project was provided. In case of NE States, hilly areas and SC / ST entrepreneurs, subsidy was provided @ 33.33 per cent of the capital cost of the project. The Scheme has since been modified with effect from 20 October 2004, to provide subsidy @ 25 per cent to farmers, Agriculture graduates, cooperatives and Central Warehousing Corporation / State Warehousing Corporations. All other categories of individuals companies and corporations are now given subsidy @ 15 per cent of the project cost. The scheme has been made farmer friendly by allowing subsidy for smaller godowns of 50 MT size in general and of 25 in hilly areas. Five lakh tonnes capacity to be created is reserved for small farmers. The scheme is being implemented through NABARD and NCDC. Till 31 May 2006, 11,583 storage projects having a capacity of 166.42 lakh tonnes have been sanctioned under the scheme .

ii) With a view to establish a nation-wide information network for speedy collection and dissemination of price and market related information to farmers, electronic connectivity is being provided to all important agricultural markets in the country under a Central scheme, **'Market Research and Information Network'**. 2,408 market nodes and 92 State Marketing Boards and Directorate of Marketing and Inspection offices have been networked on a single portal, wherein daily prices of more than 300 commodities and about 2000 varieties are being reported. It is planned to connect 2,700 markets in all, under the scheme during the 10th Plan.

iii) The Ministry of Agriculture is implementing another Central Sector scheme for **"Development / Strengthening of Agricultural Marketing Infrastructure, Grading and Standardisation"**. Under the scheme, investment subsidy is provided @ 25 per cent on the capital cost of the marketing infrastructure development project subject to a maximum of Rs 50 lakh for each project in all States and @ 33.3 per cent of capital cost subject to a maximum of Rs 60 lakh for each project in case of North Eastern States, hilly areas and to Scheduled Castes / Scheduled Tribes entrepreneurs. In respect of infrastructure projects of State Governments / State Agencies, there is no upper ceiling on subsidy to be provided under the scheme. The scheme is reform-linked, to be implemented in those States / Union Territories wherein the law dealing with agriculture markets (Agricultural Produce Marketing Regulation Act) allows

setting up of competitive agricultural markets in private and cooperative sectors, direct marketing and contract farming. The States of Andhra Pradesh, Punjab, Kerala, Tamil Nadu, Manipur, Sikkim, Madhya Pradesh, Himachal Pradesh, Nagaland, Rajasthan, Chattisgarh and Union Terriroty of Andaman and Nicobar Islands, Daman and Diu and Dadra and Nagar Haveli have notified to receive assistance under the Scheme. The remaining States / UTs are in the process of amending their APMC Acts. 158 training and awareness programmes have been conducted in the notified States / UTs. A total number of 259 new project proposals have been provided advance subsidy of Rs 516.30 lakh by NABARD in the States of Madhya Pradesh, Tamil Nadu, Punjab, Andhra Pradesh and Kerala.

iv) The Department has recently taken the initiative to promote modern terminal markets for fruits, vegetables and other perishables in important urban centres of the country. These markets would provide state of art infrastructure facilities for electronic auction, cold chain and logistics and operate through primary collection centres conveniently located in producing areas to allow easy access to farmers. The terminal markets are envisaged to operate on a 'Hub-and-Spoke' format wherein the Terminal Market (the hub) would be linked to a number of collection centres (the spokes), conveniently located in key production centers to allow easy access to farmers for the marketing of their produce. The concept on setting up of Terminal Markets for perishable commodities was discussed with the State Governments and interested private enterprises at a national conference of State Ministers held on 20 February 2006 at New Delhi. Based on the discussions, a Committee has been constituted under the Chairmanship of Director General, National Institute of Agricultural Marketing, Jaipur with members from participating State Governments to develop a framework for the bidding process for selecting the enterprise for the implementation of terminal market projects and to work out implementation modalities. Central assistance to these projects is planned by way of equity participation.

The Department of Agriculture and Cooperation has three organisations dealing with marketing under its administrative control, namely, the Directorate of Marketing and Inspection (DMI), Faridabad, the Ch. Charan Singh National Institute of Agricultural Marketing (NIAM), Jaipur and the Small Farmers Agri-Business Consortium (SFAC), New Delhi.

DIRECTORATE OF MARKETING AND INSPECTION

It is an attached office of the Department and is headed by Agricultural Marketing Adviser. The Directorate has its Head Office at Faridabad (Haryana), Branch Head Office at Nagpur (Maharashtra), 11 Regional Offices and the Central Agmark Laboratory at Nagpur. Besides, there are 26 Sub-Offices, 16 Regional Agmark Laboratories (RALs) spread all over the country.

The main functions of the Directorate are as follows:

1. Rendering advice on statutory regulation, development and management of agricultural produce markets to the States / UTs;
2. Promotion of Standardisation and Grading of agricultural and allied produce under the Agricultural Produce (Grading and Marking) Act, 1937;
3. Market Research, Surveys and Planning;
4. Training of personnel in Agricultural Marketing;
5. Marketing Extension;

6. Agricultural Marketing Information Network;
7. Construction of Rural Godowns; and
8. Development of Agricultural Marketing Infrastructure.

Grading and Standardisation : The Agricultural Produce (Grading and Marking) Act, 1937 empowers the Government to fix quality standards, known as "AGMARK" standards and to prescribe terms and conditions for using the seal of 'AGMARK'. So far, grade standards have been notified for 182 agricultural and allied commodities. The purity standards under the provision of the Prevention of Food Adulteration (PFA) Act, 1954 and Bureau of Indian Standards (BIS) Act, 1986 are invariably taken into consideration while framing the grade standards. International Standards framed by Codex / International Standards Organisation (ISO) are also considered so that Indian produce can compete in the international market.

During the year 2005-06, the final notification of Spices G & M Rules, 2005 was published, containing standards of eleven spices, namely, large Cardamom, Cardamom, Turmeric, Chillies, Ginger, Black Pepper, Coriander, Fennel, Fenugreek, Celery, Cumin, etc. The standards of Walnut duly harmonised with the international standards have been submitted to APEDA and were discussed in the Core Group's Meeting. The approval of Standing Committee on fresh Fruits and Vegetables is awaited for commodities like Lemons, Limes, Mandarins, Oranges, Grape Fruits, Walnuts in-shell and shelled Walnut. The final notifications published in the Gazette during the last three years have been uploaded on website www.agmarknet.in for users.

NATIONAL INSTITUTE OF AGRICULTURAL MARKETING

The National Institute of Agricultural Marketing (NIAM) started functioning at Jaipur (Rajasthan) from 8 August 1988. NIAM has been imparting training to senior and middle level executives of agricultural and horticultural departments, Agro Industries, Corporations, State Marketing Boards, Agricultural Produce Market Committees and Apex level Cooperatives, Commodity Boards, export houses recognised by Agricultural and Processed Food Products Export Development Agency (APEDA), Commercial Banks and non-governmental organisations. Besides these clients, the NIAM also imparts training to farmers on marketing management. The main objectives of NIAM are : (1) To provide specialised training in agricultural marketing designed to develop leadership potential in the management of agricultural marketing enterprises and services; (2) To undertake research in agricultural marketing for Government, Cooperative and other Institutes, both on public funding and by contract; (3) To undertake appraisal of markets / marketing projects for approval and financial support by the Central Government, on consultancy basis; (4) To formulate objective criteria for selective development of physical markets and to evolve a practical methodology for the application of such criteria in their planning; (5) To offer advisory and consultant services on marketing policies, investment programmes and marketing development strategies and specific advice to marketing enterprises (State, Private and Cooperatives); (6) To survey, study and analyse the rural market management and to examine in depth the principal and practice of market regulation as a development sector in the agricultural economy.

The NIAM is managed by a Governing Body under the Chairmanship of Minister of Agriculture and an Executive Committee under the Chairmanship of Secretary, Department of Agriculture and Cooperation.

Training Activities : The Institute organises Training Programmes for officials, farmers and other functionaries. In 2003-04 Management Development Programmes (MDP) were introduced. So far four MDPs have been successfully organised for leading companies like Bayer Crop Science, MICO BOSCH, etc. The MDPs were held at NIAM campus and 120 working executives of these MNCs working in various capacities have benefited by this programme. All these MDPs were rated excellent by the participants and many other companies have shown keen interest in organising MDPs at NIAM, Jaipur.

Research: The domestic Agricultural Marketing scenario has witnessed lot of changes in policies and regulations. The enactment of Model Act by some States has brought substantial improvements in trade and marketing. Following Research studies are being conducted by NIAM during the year 2005-06.

1. Contract Farming – prospects and implications
2. Commodity Trade Research
3. Market led extension – a participatory approach
4. Developing India GAP Standards
5. Information need assessment of stakeholders in Agricultural Marketing – A case of Rajasthan

Project Formulation: In order to generate resources and ensure optimum utilisation of the expertise of the NIAM faculty, the Institute is taking up several Consultancy Projects in the year 2005-06. These include setting up Modern Terminal Market for fruits and vegetables at Nashik, Chandigarh, Nagpur, Patna, Bhopal, Rai (Haryana), Multi-utility integrated facility Centre-Pack house at Ludhiana for MARKFED, Punjab, State Master Plan for Market Development in Orissa, Price Forecasting for Agricultural Commodity in Karnataka, On-line Market information system for Karnataka, Designing, Planning and detailed Project report for CA Storage at Kolkata. Detailed Project Reports have been prepared for the Modern Terminal Markets at Nashik, Nagpur, Chandigarh, Bhopal and Rai (Haryana).

Post Graduate Programme in Agri-Business Management (PGPABM): The Institute has undertaken Post-Graduate Programme in Agri-Business Management (PGPABM) as a Sub-centre of MANAGE, Hyderabad from July 2001 and 50 students are presently undergoing Post-Graduate Programme in Agri-Business. The programme is designed to assist agricultural graduates to acquire the critical know-how to compete in the domestic and global business arena and to make them efficient agri-business managers.

SMALL FARMERS' AGRI-BUSINESS CONSORTIUM

The Small Farmers Agri-business Consortium (SFAC) was registered by Department of Agriculture and Cooperation as a Society under the Societies Registration Act, 1860 on 18 January 1994. Members at present include RBI, SBI, IDBI, EXIM Bank, Oriental Bank of Commerce, NABARD, Canara Bank, NAFED, United Phosphorous Ltd., etc.

The SAFC is managed by a Board of Managers consisting of 20 members and chaired by Hon'ble Union Minister of Agriculture as its Ex-Officio President and the Secretary (Department of Agriculture and Cooperation), Government of India as its Ex-Officio Vice President. Managing Director is the Chief Executive of SFAC. SFAC has established 18 State level SFACs by contributing a corpus fund. The mission of

the Society is to support innovative ideas for generating income and employment in rural areas by promoting private investments in agribusiness projects.

The Central sector scheme for agri-business development implemented by SFAC was approved by the Government on 19 July 2005 for implementation during remaining period of the Tenth Plan with an outlay of Rs 48 crore. The scheme is being implemented by SFAC in close association with commercial banks for providing (a) Venture Capital Assistance to agribusiness projects and (b) assist farmer / producer groups in preparation of quality Detailed Project Reports (DPR).

The main objectives of the scheme are to facilitate setting up of agribusiness ventures in participation with banks, catalyse private investment in setting up of agribusiness projects and thereby providing assured market to producers for increasing rural income and employment, strengthen backward linkages of agri-business projects with producers, assist farmers, producer groups, and agriculture graduates to enhance their participation in value chain through project development facility, arrange training and visits, etc., of agripreneurs setting up identified agribusiness projects. SFAC provides financial assistance to agri-business projects by way of equity participation.

The quantum of SFAC venture capital assistance depended on the project cost and will be the lowest of the following -

- 10 per cent of the total project cost assessed by the bank
- 26 per cent of the project equity
- Rs 75 lakh

Higher venture capital assistance can be considered by SFAC to deserving projects on merit and / or to projects that are located in remote and backward areas, North-eastern and hilly States and projects recommended by State agencies.

The outlay for implementation of the scheme during 2005–2006 was Rs. 10 crore which has been utilised. During the year venture capital assistance has been sanctioned to 44 agribusiness projects and assistance has been provided for preparation of 11 Detailed Project Reports(DPRs). The allocation for implementation of the scheme during 2006-07 is Rs. 38 crore.

COOPERATION

Cooperative Reforms : The Cooperative movement in India traces its origin to the agriculture and allied sector and was evolved as a mechanism for pooling meagre resources of the people with a view to providing them with the advantages of economies of scale. After independence, the cooperatives were considered as part of the strategy for planned economic development. The cooperatives are today at the crossroads of existence particularly in view of the fast emerging scenario of economic liberalisation and globalisation. These institutions in general suffer from resource constraint, poor governance and management, inefficiency and unviability. The cooperative reforms are, therefore, absolutely vital to the future of the cooperatives.

National Policy on Cooperatives : The Union Government has formulated a National Policy on Cooperatives in consultation with States. The objective of the National Policy is to facilitate all-round development of the cooperatives in the country and to work as a guiding force for the States towards successful cooperatives. The policy, envisages that cooperatives be provided necessary support, encouragement and assistance and to ensure that they work as autonomous self-reliant and democratically managed institutions accountable to their members.

Multi-State Cooperative Societies (MSCS) Act, 2002 : The Central Government has taken a lead in providing required autonomy to the cooperatives by enacting MSCS Act,2002, replacing the MSCS Act, 1984. It aims at providing functional autonomy and democracy applicable to National level cooperative societies / federations and other Multi-State Cooperative societies. It is expected that it will work as a Model Act for reforms in State Cooperative Laws.

The NCDC (Amendment) Act, 2002 : The NCDC Act, 1962 has been amended vide NCDC (Amendment) Act, 2002 expanding the mandate of NCDC to include food stuff, industrial goods, livestock and services in the programmes and activities in addition to the existing programmes. The definition of agriculture produce has been amended to cover wider range of activities by including edible and non-edible oilseeds cattle feed, produce of horticulture and animal husbandry, forestry, poultry, farming, pisiculture and other activities allied to agriculture. Vide the amended Act, definition of industrial goods and livestock have been elaborated covering the products of allied industries in the rural areas and includes any handicrafts or rural crafts. The livestock includes all animals to be raised for milk, meat, fleece, skin, wool and other by-products. NCDC will be able to provide loan directly to the cooperative without State / Central Government guarantee on furnishing of security to the satisfaction of the NCDC. So far activities concerning water conservation, animal care / health, disease prevention, agricultural insurance an agricultural credit, rural sanitation / drainage / seweage have been made as notified services.

Amendment to the Constitution in respect of Cooperatives : In spite of the felt need for amendment in the State Cooperative Societies Act, the pace of reforms in Cooperative legislations by the States is not encouraging. Therefore, to ensure the democratic, autonomous and professional functioning of cooperatives, it has been decided to initiate a proposal for amendment to the Constitution for the purpose. This decision has been taken after careful deliberations with the States in a conference of State Cooperative Ministers held on 7 December 2004. The proposed amendment to the Constitution is purported to address the key issues for empowerment of cooperatives through their voluntary formation, autonomous functioning, democratic control and professional management. The Constitution One Hundred and Sixth Amendment Bill 2006 has been introduced in the Lok Sabha on 22 May 2006.

Constitution of High Powered Committee : To review the achievements of Cooperative movement during the last 100 years and challenges before it, and to suggest ways and means to face them and to give a new direction to the movement, a high-powered committee has been constituted with following Terms of Reference:

(1) To review the achievements of the cooperatives during the last 100 years.

(2) To identify the challenges being faced by the cooperative sector and to suggest measures to address them to enable the movement to keep pace with the changing socio-economic environment.

(3) To suggest an appropriate policy and legislative framework and changes required in the cooperative legislation in the country with a view to ensure the democratic, autonomous and professional functioning of cooperatives.

Revamping of Cooperative Credit Structure : In August 2004, Government of India constituted a Task Force under the Chairmanship of Prof. A Vaidyanathan for suggesting measures for revival of cooperative credit institutions. The Task Force has submitted its Report in respect of short-term cooperative credit structure and

recommended a financial package of Rs 14,839 crore for the short- term rural credit cooperative institutions. The package covers accumulated losses, unpaid invoke guarantees, receivables from State Governments, return of share capital to State Governments, Human Resources Development, conduct of special audit, computerisation, implementation costs, etc.

Based on the consensus arrived at with State Governments and other stakeholders on the recommendations made by the Task Force, the Government has approved the package for revival of the Short-term Rural Cooperative Credit Structure involving financial assistance of Rs. 13,596 crore. The provision of financial assistance under the package has been linked to reforms in the cooperative sector. The same Task Force has been assigned the mandate for suggesting revival package for the Long-Term Cooperative Credit Structure. The Government will initiate steps for reviving Long-Term Cooperative Credit Structure after reviving the report of the Task Force in this regard.

ANIMAL HUSBANDRY

Animal Husbandry and Dairy Development plays a prominent role in the rural economy in supplementing the income of rural households, particularly, the landless and small and marginal farmers. It also provides subsidiary occupation in semi-urban areas and more so for people living in hilly, tribal and drought-prone areas where crop output may not sustain the family. According to estimates of the Central Statistical Organization (CSO), the value of output from livestock and fisheries sectors together at current prices was about Rs. 2,25,841 crores at current prices during 2005-06 (Rs. 1,85,166 crores for livestock sector and Rs. 40,675 crores for fisheries) which is about 31 per cent of value of output of Rs. 7,20,340 crores from total of Agriculture, Animal Husbandry & Fisheries sector. The contribution of these sectors to the total GDP during 2005-06 was 5.30%.

India is endowed with the largest livestock population in the world. It accounts for 57 per cent of the world's buffalo population and 14 per cent of the cattle population. According to Livestock Census (2003), the country has about 18.5 crore cattle and 9.8 crore buffaloes.

CONTRIBUTION OF LIVESTOCK SECTOR TO FOOD BASKET

The contribution of livestock sector to the food basket in the form of milk, eggs and meat has been immense in fulfilling the animal protein requirement of ever-growing human population. The present availability of human protein in an Indian diet is 10gm per person per day, as against a world average of 25gm. However, keeping in view the growing population, the animal protein availability has to increase at least twofold, for maintaining the nutritional level of growing children and nursing mothers in India.

Milk Production : The egg production in the country has reached 46.2 billion numbers in 2005-06.

Wool Production : The wool production in the country has reached 44.9 million kg during 2005-06.

Other Livestock Products : Livestock sector not only provides essential protein and nutritious human diet through milk, eggs, meat etc., but also plays an important role in utilization of non-edible agricultural by-products. Livestock also provides raw material by products such as hides and skins, blood, bone, fat etc.

Livestock Insurance Scheme : The Livestock Insurance Scheme was Implemented during the last two years of the 10th Five Year Plan i.e. 2005-2006 and 2006-07 on pilot basis in 100 selected districts across the country. The scheme was formulated with the twin objective of providing protection mechanism to the farmers and cattle breeders against any eventual loss of their animals and to demonstrate the benefit of the scheme to the people and to popularize it with the ultimate goal of attaining qualitative improvement in livestock and their products. Under the scheme, 50% subsidy on the insurance premium for insuring crossbred and high yielding cattle and buffaloes was provided. The entire cost of subsidy payment of honorarium to veterinary practitioners and funds for publicity were borne by the Central Government. The subsidy in the premium during the pilot period was provided for an animal for a maximum period of three years and limited to two animals per beneficiary. The scheme was implemented through the State Implementing Agencies (SIA) implementing the National Project on Cattle and Buffalo Breeding (NPCBB) programme of the Department.

During the pilot period, about 4.6 lakh cattle / buffaloes were insured with an expenditure of Rs. 20.77 crore. About 1750 cases of claim were settled with claim settlement of Rs. 2.38 crore during the same period.

The continuation of the Scheme in the same form during 2007-08 and 2008-09 is under consideration of the Government.

CATTLE AND BUFFALO DEVELOPMENT

India possesses 27 acknowledged indigenous breeds of cattle and seven breeds of buffaloes. Various Central and Centrally sponsored schemes are being implemented for genetic improvement of cattle and buffalo with a view to enhance the per capita availability of consumption of milk through increased milk production. Efforts are also made to protect and preserve the indigenous cattle and buffalo in their native tract, which are facing threat of extinction. The elite animals are selected and registered on the basis of their performance for production of superior pedigree bulls, bull-mothers, frozen semen and frozen embryos for future breeding improvements.

The National Project for Cattle and Buffalo Breeding envisages 100 per cent grant in aid to implementing agencies. The Project will also promote about 34,000 private A.I. practitioners and build up an annual frozen semen production capacity of 70 million doses. Since inception, 28 states and one Union Territory have been assisted with Rs. 412.79 crores upto 31st March, 2007 for participating in the project.

A Central Herd Registration Scheme for identification and location of superior germ plasm of cattle and buffaloes, propagation of superior germ stock, regulating the sale and purchase, help in formation of breeders society and to met requirement of superior bulls in different parts of the country is also being implemented. The Government of India has established Central Herd Registration Unit in four breeding tracts i.e. Rohtak, Ahmedabad, Ongole, Ajmer. A total of 92 Milk Recording Centres are functioning to register these breeds of cattle viz. Gir, Kankrej, Hariana and Ongole and in Buffalo Jaffrabadi, Mehsani, Murrah and Surti. During 2006-07, 14,244 animals were registered.

The seven Central cattle breeding farms at Suratgarh (Rajasthan), Chiplima and Semiliguda (Orissa), Dhamrod (Gujarat), Hessarghatta (Karnataka), Alamadi (Tamil Nadu) and Andeshnagar (Uttar Pradesh) are engaged in scientific breeding programmes of cattle and buffaloes and production of high pedigreed bulls for National

Project for Cattle / Buffaio Breeding Programme besides providing training to farmers and breeders. During 2006-07, these farms produced 326 bull calves and supplied 235 high pedigreed bulls for use under Artificial Insemination Programme in various parts of the Country. The Central Frozen Semen Production and Training Institute, Hessarghatta (Karnataka) produced 13.06 lakh doses and supplied 12.88 lakh dozes of frozen semen of high pedigreed Sahiwal, Red Sindhi, Holstein Friesian, Jersey, crossbred and Murrah bulls to different states for their A.I. Programmes.

POULTRY DEVELOPMENT

The value of output from poultry sector is nearly Rs. 17000 crore from eggs and meat only and it provides direct or indirect employment to over 3 million people. About 25% of the total egg production in the country comes from desi poultry, which is unorganized rural backyard system. A target for achieving production of over 52 billion eggs by 2011-12, at a growth rate of 4.3 percent has been set by the Government of India.

Poultry sector, besides employment generation and subsidiary income increase, provides nutritonal security especially to the rural poor. Further landless labourers derive more than 50 percent of their income from livestock especially from poultry.

Central Poultry Development Organization had been playing a pivotal role in the implementation of the policies of the Government with respect to poultry as a tool for alleviating nutritional hunger and palliating the impecuniosities of the resource - poor farmers especially the women. The mandate of Central Poultry Development Organization has been specially revised, by restructuring all poultry units of this Department to focus on improved indigenous birds. Which lay on an average 180-200 eggs per annum and have vastly improved FCR ratio in terms of feed consumption and weight gain. The Central Poultry Development Organizations have been entrusted with the responsibility of producing excellent germplasm in the form of day-old chicks hatching eggs of these varieties like Nirbheek, Hitkari, Vanaraja, Shyama Cari, CHABRO, etc. Besides these Organizations are imparting training to approximately 1200-1500 farms every year in-situ and ex-situ. These organization are also playing a crucial role in analyzing feed samples.

In these organizations, besides the activites stated above, scaling-up of diversification of other avian species like Ducks / Turkeys / Guinea fowl / Japanese Quail, upgradation of Training Until into International Tropical Avian Management Institute in which private-public partnership is envisaged. Presently, these organizations are also supporting and hand-holding the Centrally Sponsored Scheme Assistance to State Z Poultry Farms.

The Random Sample Poultry Performance Testing Centre (RSPPTC) Gurgaon is entrusted with responsibility of testing the performance of layer and broiler varieties. This Centre conducts one layer test for the period from 0-72 weeks of age where in the production parameters of the laying birds received from different participants comprising private and public sector agencies are tested. At the end of the test, data are analysed and the report indicating the relative performance, of these entrants is published Accordingly, two broiler test are conducted every year from 0.8 weeks age and the results are published giving full information about growth rate, feed efficiency and margin of profit from each entrant. The report is published for the utilization of the poultry industry in general, and the breeder participants in particular. This Centre gives valuable information relating to different genetic stock available in the country.

A centrally sponsored scheme called Assistance to State Poultry Farms is being implemented during the Tenth Plan in all States and UTs where one time assistance is provided to suitably strengthen the farms in terms of hatching, breeding and rearing of the birds with provision for feed mill and their quality monitoring and in-house disease diagnostic facilities. During the Tenth Plan, nearly Rs. 75.0 crore has been released for a listing around 180 farms, some partially.

A scheme "Dairy / Poultry Venture Capital Fund" has been launched during the year 2004-05, wherein there is a provision to grant subsidy on interest payment. Components like establishment of poultry breeding Flow / Quil / Emu / Ostrich, establishment of feed downs, feed mill, feed analytical laboratory, marketing of poutry products (specialized transport vehicle, cool room storage facilities and retention sheds for birds etc.) Egg grading, packing and storage for export capacity, Retail poultry dressing units (300 birds per day), Egg / broiler carts for sale of poultry products and Central grower unit are considered for financing under this scheme. The nodal agency for the implementation of this scheme is NABARD through nationalised commercial banks. As per the largest report, a total of 84 poultry units involving Rs. 3.42 crore has been approved. (Till 31-3-2007)

SHEEP DEVELOPMENT

According to Livestock census 2003, there are about 61.47 million sheep and 124.36 million goats in the country. About five million households in the country are engaged in the rearing of small ruminants sheep & goats rabbets and other allied activities. The wool production was about 44.90 million kg during 2005-2006.

Central Sheep Breeding Farm, Hissar is producing acclimatized exotic / cross bred superior quality rams. The farm has supplied 733 rams during 2006-07 to different States. It hopes to supply 900 rams in 2007-08.

CONSERVATION OF THREATENED BREEDS

The population of some of the pure bred small ruminants, equines, pigs and pack animals has come down considerably and such breeds have come to the category of threatened breeds in the country.

A new centrally sponsored scheme for conservation of such threatened breeds was started during Tenth Five Year Plan with a budget outlay of Rs. 1500 lakhs. Farms / farmer's unit in their respective breeding tract are established under the scheme with 100% central assistance. The conservation projects are being implemented by State Governments, Universities and NGO's. During the Tenth plan period, conservation projects for 27 breeds were taken up. During 2006-07, an amount of Rs. 241.50 lakh was release for the conservation of Terres Goat (Rs. 50.00 lakh) in Andaman & Nicobar Islands, Spiti Pony (Rs. 27.55 lakh) in Himachal Pradesh, Zanskari Horse (Rs. 34.24 lakh) and Doubled Humped Camel (Rs. 25.17 lakh) in Jammu & Kashmir, Sangamneri Goat (Rs. 32.50 lakh) in Maharastra and Garole Sheep (Rs. 28.54 lakh) and Black Bengal goat (Rs. 32.25 lakh) in West Bengal. Evaluation of performance of the Scheme during Xth plan has been entrusted to NABCONS, a wholly subsidiary of NABARD.

MEAT PRODUCTION / PROCESSING AND EXPORT

There are 15 export-oriented integrated modern abattoirs and 16 meat processing plants registered with Agricultural and Processed Food Products Export Development Authority exporting raw meet (Chilled and frozen) to about 56 countries. During

2005-06, about 459937.63 M.T. Buffalo Meat and 7177.51 MT sheep / goat meat valued at Rs. 2629.57 crore and Rs. 80.37 crore respectively were exported. During April-December 2006, meet and its products worth Rs. 2415.63 crore have been exported indicating 18.20% growth in rupees export.

PIGGERY DEVELOPMENT

As per Livestock census 2003, the pig population in the country was 139.19 lakhs of which 21.80 lakhs were cross bred / exotic pigs. Exotic breeds like white Yorkshire, Hampshire and Landrace are maintained at these farms. There are about 158 pig breeding farms in the country run by the State Governments / UTs. Efforts are being made in consultation with Planning Commission and other appraisal agencies to initiate Integrated Piggery Development Scheme under Macro Management Scheme during 11th Five Year Plan.

FEED AND FODDER DEVELOPMENT

For the development of the production potentiality of our livestock, availability of nutritous feed and fodder is essential. To facilitate fodder availability, seven regional Stations have been established in different agro climatic Zones of the country for production of high yielding varieties of fodder / fodder seed and transfer of scientific fodder production technology through training of officers / farmers, demonstration of latest fodder agronomic practices and organization of farmer fairs. During 2006-07 these stations produced 178.2 MT of high yielding fodder variety seeds, conducted 4472 field demonstrations, organized 93 training programmes and 83 Farmer Fairs.

During 2006-07 a Central Fodder Seed Production Farm located at Hessarghatta (Karnataka) working with the same objectives as of Regional Stations produced 101 MT fodder seeds of different varieties of grasses / legumes, conducted 570 field demonstrations, organizes 13 training programmes and organized 14 farmers lairs. A Central Minikit Testing programme of fodder crops is under implementation for popularizing high yielding fodder varieties on a large scale through Director Animal Husbandry of States. During 2006-07, 5.64 lakh minikits were allotted to the states for distribution to the farmers free of cost. Besides a centrally sponsored fodder development scheme is being implemented from 2005-06 for establishment of fodder Block making units, grass land development including grass reserve, fodder seed production and bio-technology research project. During 2006-07, financial assistance of Rs. 2644.61 lakh was provided to States, which includes Rs. 1662.00 lakh released under Special package for Suicide prone districts of Maharastra, Karnataka, Andhra Pradesh and Kerala.

DAIRY DEVELOPMENT

The Indian Dairy Industry has acquired substantial growth from the Eighth Plan onwards, achieving an annual output of over 97.1 million tones of milk at the end of 2005-06. India's milk output has not only placed the industry first in the world, but also represents sustained growth in the availability of milk and milk products. The per capita availability of milk is estimated to reach 245 gm per day during 2006-07. The Government implemented four schemes for the development of dairy sector during 2006-07.

(a) Intensive dairy Development Programme : The Scheme, modified as Intensive Dairy Development Programme on the basis of the recommendation of the evaluation studies was launched during Eighth Plan period and is being continued during the Eleventh Plan with an outlay of Rs. 23.00 crore for 2007-08. So far 82 projects with an

outlay of 462.75 crore have been sanctioned in 25 States and one UT. A sum of Rs. 307.78 crore has been released to various State Governments upto 31st March, 2007 and 200 districts have been covered. The scheme has benefited about 11.66 lakh farm families and organized about 1971 8 village level Dairy Cooperative Societies till 31st March, 2007.

(b) Strengthening Infrastructure for Quality and Clean Milk production : A new centrally sponsored scheme was launched in Oct 2003, with the main objective of improving the quality of raw milk produced at the village level in the country. Under this scheme, assistance is provided for training of farmers on good milking practices. The scheme is being implemented on 100 per cent grant-in-aid basis to District Coop Milk Union and State Coop Milk Federation through the State Governments / UTs for components viz, training of farmer members, detergents, stainless steel utensils, strengthening of existing laboratory facilities whereas 75 percent financial assistance is provided for setting up of milk chilling facilities at village level in the form of bulk milk coolers. Since inception, 122 projects in 22 States at a total cost of Rs. 169.86 crore with a central share of Rs 139.34 crore have been approved up to 31st March 2007 under this scheme. A sum of Rs. 24.65 crore during 2004-05, Rs. 30.39 crore during 2005-06 and another sum of Rs. 24.65 crore during 2006-07 as central share has been released to the concerned State Government for implementation of approved project activities up to 31.03.07.

(c) Assistance to cooperatives : The scheme 'Assistance to Cooperatives' is a Central Sector Plan Scheme started during the year 1999-2000. To revitalize the sick dairy cooperative unions at the district level and cooperative federations at the State level National Dairy Development Board (NDDB) is the project implementing agency and the Central grant under the scheme are provided to the Milk Unions through NDDB.

A number of dairy cooperatives with there-tier structure viz. village level / primary cooperatives, district level unions and state level federations have been set up in different parts of the country under the Operation Flood Programme. For a variety of reasons, a number of these unions / federations have accumulated losses. These accumulated losses have been imposing severe hardships to the milk producers and their dairy economy, resulting in, among other things, delayed and irregular payments to the poor farmer members of these cooperatives. The Scheme seeks to assist the sick cooperative milk unions / federations to rehabilitate them and make them viable.

The funds are released on 50-50 sharing basis between Union of India and the concerned State Government. The maximum assistance of grant is limited to the minimum amount required so that the net flow becomes positive within seven years. In any case the total grant does not exceed the accurnulated cash losses.

The Department has approved 31 rehabilitation proposals of Milk Unions in 12 States namely Madhaya Pradesh, Chattisgarh, Karnataka, Uttar Pradesh, Kerala, Maharashtra, Assam, Nagaland, Punjab West Bengal, Haryana and Tamil Nadu, with a total outlay of Rs. 192.5 crore.

Out of 50% Government of India share of Rs. 96.24 crore an amount of which Rs. 74.14 crore has been release till 31st March, 2007.

(d) Dairy / Poultry Venture Capital Fund : To bring about structural changes in the unorganized sector, the measures like milk processing at village level, marketing of pasteurized milk in a cost effective manner, quality up-gradation of traditional technology to handle commercial scale using modern equipment and management

skills and to encourage new pieces of birds and low input technology for poultry farming among rural farmers, a new scheme viz, Dairy / Poultry Venture Capital Fund was initiated in the Tenth Five Year Plan. The assistance under the scheme is provided to the rural / urban beneficiaries, under the scheme include agriculture farmers / individual entrepreneurs and groups of all sections of unorganized as well organized sector including cooperatives and NGO from any part of the country.

The scheme is being implemented through NABARD and funds amounting to Rs. 28.00 crore have been released to NABARD during the Tenth Five Year Plan, to be kept as revolving fund for implementation of the scheme. There is a budget provision of 45.00 crore for implementation of the scheme during 2007-08.

Pattern of Assistance :

- Entrepreneurs contribution 10 per cent
- Interest-free Loan from revolving fund 50 per cent
- Bank loan at interest applicable for agricultural activities 40 per cent

The interest component applicable for agricultural activities is subsidized by Government of India to the extent of 50 per cent only in case of regular / timely repayment by the beneficiary.

(e) Milk and Milk Product Order-1992 : The Government of India notified the Milk and Milk Product Order on June 1992. As per the provisions of this order, any person / dairy plant handling more than 10,000 liters per day of milk or 500 MT of milk solids per annum needs to be registered with the registering authority appointed by the Central Government on 27th August 1993.

The Order was amended from time to time as per the decision taken in Milk and Milk Product Advisory Board and as per request received from State Governments. In pursuance of the Cabinet decision dated 22 / 2 / 2002, this Department has amended MMPO-1992 vide Milk and Milk Product (Amendment) Order 2002, SO No. 335(E) dated 26.3.2002, where the provisions of assigning milk shed has been done away with. The power of granting Registration to the units up to 2.00 lakh liters per day processing capacity where entire activities of units lies within a State has been delegated to concerned State Registering Authority.

So for Central Registering Authority and State Registering Authority have granted registration to 818 units with a combined capacity of 952.93 lakh liters per day of milk up to 31.3.2007.

LIVESTOCK HEALTH

Animal wealth in India has increased manifold. The Animal husbandry practices have also been changed to a great extent. Due to the liberalization of trade after the advent of the WTOs SPS agreement, the chances of ingress of exotic diseases into the country have increased. With the improvement in the quality of livestock through launching of extensive cross breeding programmes, the susceptibility of these livestock to various diseases including exotic diseases has increased. For ensuring the maintenance of disease-free status and to be compatible with the standards led by the World Animal Health Organization (OIE), major health schemes have been initiated to support animal health programmes in the State.

In order to reduce morbidity and mortality, efforts are being made by the State / Union Territory Governments to provide better health care through Polyclinics / Veterinary Hospitals / Dispensaries / First-Aid Centres including Mobile Veterinary

Dispensaries. A network of 26,540 Polyclinics / Hospitals / Dispensaries and 35433 Veterinary aid Centres (including Semen Centres / Mobile Dispensaries), supported by about 250 Disease Diagnostic Laboratories, are functioning in the States and Union Territories for quick and reliable diagnosis of diseases. In order to provide refertal services over and above the existing disease diagnostic Laboratories are also functioning. Further, for control of major livestock and poultry diseases by way of propnylactic vaccination, the required quantity of vaccines are produced in the country at 27 veterinary vaccine production units of these, 22 are in the public sector and 5 in private sector. Import of vaccines is also permitted as and when required.

A. Animal Quarantine and Certification Service : The objective of this service is to prevent ingress of livestock diseases into India by regulating the import of livestock and livestock related products, and providing export certification of International Standards for livestock and livestock products which are exported from India. There are four existing Stations for Animal Quarantine and Certification Service one each at New Delhi, Chennai, Mumbai and Kolkata.

B. National Veterinary Biological Products Quality Control Centre : At present the Indian Veterinary Research Institute has been assisting in the task of monitoring the quality of vaccines and biologicals. But in order to obtain better monitoring of the quality, it is essential to establish a separate Institute. For this purpose, it has been decided to set up National Veterinary Biological Quality Control Centre **(National Institute of Animal Health)** at Baghpat, Uttar Pradesh at the end of 9th Plan. The construction work of the Institute is almost at completion stage and it is expected that the Institute will be functional very soon.

C. Central / Regional Disease Diagnostic Laboratories : In order to provide referral services over and above the existing disease diagnostic laboratories in the States, one Central and five Regional Disease Diagnostic Laboratories have been set up by strengthening the existing facilities. The Centre for Animal Disease Research is functioning as Central Laboratory in conjunction with the Disease Investigation Laboratory, Pune, Institute of Animal Health and Veterinary Biologicals, Kolkata, Institute of Animal Health & Biologicals, Bangalore, Animal Health Institute, Jalandhar and Institute of Velerinary Biological, Khanapara, Guwahati are functioning as referral laboratories for Western, Eastern, Southern, Northern and North-Eastern region, respectively.

D. Livestock Health and Disease Control (LH&DC) : In order to control the economically important livestock diseases and to undertake the obligatory is implementing ''Livestock Health and :Disease Control (LH&DC) with the following components.

(i). Assistance to States for Control of Animal Diseases (ASCAD) : Under this component, assistance is provided to State / Union territory Governments for control of economically important diseases of livestock and poultry by way of immunization strengthening of existing State Veterinary Biological Production Units, strengthening of existing Disease Diagnostic Laboratories and in-service training to Veterinarians and para-veterinarians. Besides this, the programme envisaged collection of information on the incidence of various livestock and poultry diseases from States and Union Territories and compiling the same for the whole country. The information so complied is disseminated in the form of Monthly Animal Disease Surveillance Bulletin to all the States and Union Territories and also Organizations like Office International Des Epizooties (OIE), Animal Production and Health Commission for

Asia and Pacific (APHCA), etc. This information system has been harmonized in accordance with the guidelines of OIE.

(ii). National Project on Rinderpest Eradication (NPRE): The main objective of the project is to strengthen the veterinary services and to eradicate Rinderpest and Contagious Bovine Pleura Pneumonia (CBPP) by strengthening the veterinary services across the Country and to obtain freedom status from Rinderpest & CBPP infection following the pathway prescribed by Office International des Epizooties (OIE), Paris.

Country attains ''freedom from Rinderpest Infection'' :

- The first stage of ''Provisional freedom from Rinderpest disease for the whole country was achieved with effect from 1st March 1998.
- The second stage ''Freedom from Rinderpest disease'' for the country was attained with effect from 22nd May, 2004.
- The third stage and final stage of ''Freedom from Rinderpest Infection'', the country has been recognized by the World Organisation of animal Health (OIE) as free from Rinderpest infection in accordance with the provisions of Article 2.2 12.2 of the OIE Terrestrial Animal Health Code on 25th May, 2006.

Country attains ''freedom from Contagious Bovine Pleuropneumonia (CBPP) :

- As regards the country has been recognized by the World Organisation of animal Health (OIE) as free from Contagious Bovine Pleuropneumonia (CBPP) in accordance with the provisions of Article 2.3 15.2 of the OIE terrestrial Animal Health Code on 25th May, 2007.

(iii) Foot and Mouth disease Control Programme (FMD-CP) : ''Foot and Mouth Disease Control Programme'' is being implemented in 54 specified districts in the country to control the Foot and Mouth Disease. This involves 6 monthly vaccinations of susceptible livestock against FMD. Five rounds of vaccinations have been completed. Sixth round of vaccination is in progress. About 28.00 million vaccinations are conducted in every round.

E. AVIVAN INFLUENZA : PREPAREDNESS, CONTROL AND CONTAINMENT:
The first outbreak of Avian Influenza occurred in India on 18th February 2006 in the western part of India in a small area in the State of Maharashtra running contiguously over an adjoining territory of the State of Gujarat. A second outbreak was reported from Maharashtra itself. There has been no outbreak after 18th April 2006. India declared freedom from Avian Influenza on 18th August, 2006. The report has also been hosted on the website of World Organization of Animal Health (OIE).

The Government of India initiated immediate action to control and contain the outbreak. Control and containment measures comprise a series of strategic actions that are to be taken in accordance with the Action Plans for the Department of Animal Husbandry, Dairying and Fisheries (DADF) and the Ministry of Health and Family Welfare (MOHFW).

The actions taken to control and contain Avian influenza are detailed below :

1. Demarcation of infected and surveillance areas was carried out in accordance with the Action Plan. An area of 3 kms. is designated as the Infected Zone and a further area of 7 kms. is designated as the Surveillance Zone.
2. However, the poultry, both backyard and commercial, was culled in a radius of 10 kms around the affected farm premises. 10,44,599 birds were killed in the control operations.

3. Other infected materials such as poultry eggs, egg products, feathers, feed, feed materials, protective cloth used by the staff engaged in operations etc. , was also destroyed. More than 8500 metric tones of feed material and nearly 17 lakh eggs were destroyed.
4. Thereafter cleaning and disinfection of the infected premises / area was carried out. This included physical surveillance in the 10 kms radius where culling was carried out to ensure that no birds would be stocked for next three months and sero surveillance in a further radius of 5 k.ms.
6. After completion of culling. disinfection and further surveillance for a period of three months in accordance with the OIE protocol, India declared itself free from the disease on 18th August, 2006.
7. Restocking of poultry has been allowed in affected areas based on periodic testing and sampling.
8. The Government of India has maintained strategic reserve of poultry vaccine. The option of vaccination is thus available to the country. However, vaccination has not yet been introduced in the country.
9. The personnel involved in containment work were provided personal protective equipment and brought under cover of Tamiflu by the health authorities.
10. It is the policy of the Government of India to pay compensation to owner for culled poultry. The cost will be shared on a 50:50 basis with the State Government. More than 3 crore Indian Rupees has been paid as compensation. The compensation is paid soon after carrying out culling especially in case of backyard poultry.
11. India has developed innovative strategies to control and contain Avian Influenza especially pertaining to backyard poultry. The decision to kill birds in a 10 km radius has been acknowledged as a bold and decisive one.

The conduct of the operations has been appreciated by the International organizations. The FAO by letter dated 23rdFebruary has informed that it has been closely watching the recent outbreak of Navapur and appreciates the quick response initiated by the Government of India in general and of the Department of Animal Husbandry in particular. It was very encouraging to see that the poultry farmers were quickly compensated for their culled birds. The Asian Development Bank has lauded India’s efforts for similar reasons.

The WHO through letter of Regional Director, Office for South East Asia dated 10th August, 2006 has lauded the efforts made by Government of India in instituting early and effective measures through poultry culling and rapid disinfection of the affected area and restricted movement of the poultry as per the WHO, timely compensations to poultry farmers also helped in early reporting of outbreaks among birds and facilitated immediate culling operations. Further, efficient surveillance during last four months culminated in achieving avian influenza free status for the country. WHO has appreciated the commitment of the country to continue monitoring for H5N1 infection. The multi-sectoral coordination of disease prevention activities between the federal and the three provincial government authorities was considered as the key to preempt the spread of infection.

An active surveillance programme is being carried out all over the country focusing on early detection of the disease. India has a fully equipped Bio-Security Level 3 laboratory at Bhopal. More than 1,30,000 samples have been tested at Bhopal after

the first outbreak of Avian Influenza in February 2006. Targeted surveillance will focus on areas where outbreak took place; areas visited by migratory birds with poultry concentrations around them and areas of major poultry population. Personnel of Animal Husbandry and Forest Departments are being regularly trained in sample collection and dispatch. Joint mechanisms are in existence between the Health, Forests and Animal Husbandry sectors at the Central and the State levels and have been fully operationalised. Reserves of essential equipment and materials have been developed.

FISHERIES

The Department of Animal Husbandry, Dairying and Fisheries has been undertaking various production, input supply and infrastructure development programmes and welfare oriented schemes besides formulating / initiating appropriate policies to increase production and productivity in the Fisheries Sector.

Fish production since 1980-81 is shown in the table below:

(lakh tonnues)

Year	Marine	Inland	Total
1980-81	15.55	8.87	24.42
1990-91	23.00	15.36	38.36
1991-92	24.47	17.10	41.57
1992-93	25.76	17.89	43.65
1993-94	26.49	19.95	46.44
1994-95	26.92	20.97	47.89
1995-96	27.07	22.42	49.49
1996-97	29.67	23.81	53.48
1997-98	29.50	24.38	53.88
1998-99	26.96	26.02	52.98
1999-2000	28.52	23.23	56.75
2000-2001	28.11	28.45	56.56
2001-2002	28.30	31.20	62.00
2002-2003	29.90	32.10	62.00
2003-2004	29.41	34.58	63.99
2004-2005	27.78	35.26	63.04
2005-2006	28.16	37.55	65.71

The fisheries sector has been one of the major contributors of foreign exchange earnings through export. Export of fish and fishery products has grown manifold over the years. From about 15,700 tonnes valued at Rs. 3.92 crore in 1961-62, exports have grown to 5.51 lakh tonnes valued at Rs. 7018.68 crore in 2005-06.

DEVELOPMENT OF INLAND FISHERIES AND AQUACULTURE

The ongoing scheme of Development of Freshwater Aquaculture and Integrated Coastal Aquaculture have been combined with four new programmes on Development

of Coldwater Fish Culture, Development of water-logged Area and Derelict water bodies into aquaculture estates, Use of Inland Saline / Alkaline Soil for Aquaculture and programme for augmenting the Productivity of Reservoirs. This scheme broadly has two components. Aquaculture and Inland Capture Fisheries.

DEVELOPMENT OF FRESHWATER AQUACULTURE

The Government has been implementing an important programme in inland sector, viz., Development of Freshwater Aquaculture through the Fish Farmers Development Agencies (FFDAs). A network of 429 FFDAs covering all potential districts in the country are in operation. During, 2005-06, about 22,758 ha of water area was brought under fish culture and 29,952 fish farmers were trained in improved aquaculture practices through FEDAs.

DEVELOPMENT OF BRACKISHWATER AQUACULTURE

With the objective of utilizing the country's vast brackishwater area for shrimp culture, an area of about 28,885 hectares was developed for shrimp culture till 2005-06 through 39 Brackishwater Fish Farmers Development Agencies (BFDAs) set up in the coastal areas of the country. The agencies have also trained 26,536 fishermen in improved practices of shrimp culture till 2005-06. Presently about 50 percent of the shrimp exported from the country is from aquaculture.

DEVELOPMENT OF MARINE FISHERIES

The Government is providing subsidy to poor fishermen for motorizing their traditional craft, which increases the fishing areas and frequency of operation with consequent increase in catch and earnings of fishermen. About 48,226 traditional crafts have been motorized so far. The Government has also been operating a scheme on fishermen development rebate on HSD oil used by fishing vessels below 20 meter length to offset the operational cost incurred by small mechanized fishing boat operators.

DEVELOPMENT OF FISHING HARBOUR

The Government has been implementing a scheme with the objective of providing infrastructure facilities for safe landing and berthing to the fishing vessels. Since inception of the scheme, six major fishing harbours viz., Cochin, Chennai, Visakhapatnam, Roychowk, Paradip and Season dock (Mumbai), 58 minor fishing harbours and 189 fish landing centres have been taken up for construction in various coastal States / UTs.

WELFARE PROGRAMMES FOR TRADITIONAL FISHERMEN

Important programmes for the welfare of traditional fishermen are (i) Group Insurance Scheme for active fishermen, (ii) Development of Model Fishermen Villages, and (iii) Saving-cum-relief Scheme.

The fishermen identified or registered with the States / UTs are insured for Rs. 50,000 against death or permanent total disability and Rs. 25,000 against partial disability. During 2006-07 assistance has been provided to cover 14.0 lakh fishermen under insurance. Under the Development of Model fishermen in 2006-07. Under the Saving-cum-relief component, financial assistance is provided to the fishermen during the lean fishing season. About 2.20 lakh fishermen were assisted under the saving-cum-relief programme in 2006-2007.

SPECIALISED INSTITUTES

The Central Institute of Fisheries, Nautical and Engineering Training, Kochi with units at Chennai and Visakhapatnam, aims at making available sufficient number of operators of deep-sea fishing vessels and technicians for shore establishments. Integrated Fisheries Project, Kochi, envisages processing, popularizing and test marketing of unconventional varieties of fish. The Central Institute of Coastal Engineering for Fisheries, Bangalore, is engaged in techno-economic feasibility study for location of fishing harbour sites. Fishery Survey of India (FSI) is the nodal organization responsible for survey and assessment of fishery resources under the Indian Exclusive Economic Zone (EEZ).

NATIONAL FISHERIES DEVELOPMENT BOARD

In pursuance of the approval of the Cabinet, a National Fisheries Development Board (NFDB) has been set up recently with its head quarter at hyderabad to realize the untapped potential of fisheries sector in inland and marine fish capture, culture, processing and marketing of fish, and over all growth of fisheries sector with the application of modern tools of research & development including biotechnology for optimizing production and productivity form fisheries. The board has been registered under Andhra Pradesh Society Registration Act 2001. Objectives of the National Fisheries Development Board are:

i) To bring major activities relating to fisheries and aquaculture for focused attention and professional management;

ii) To coordinate activities pertaining to fisheries undertaken by different Ministries / Departments in the Central Government and also coordinate with the State / Union territory Government.

iii) To improve production, processing, storage, transport and marketing of the products and culture fisheries.

iv) To achieve sustainable management and conservation of natural aquatic rosources including the fish stocks,

v) To apply modern tools of research and development including biotechnology for optimizing production and productivity form fisheries;

vi) To provide modern infrastructure mechanisms for fisheries and ensure their effective management and optimum utilization.

vii) To generate substantial employment.

viii) Totrain and empower women in the fisheries sector, and

ix) To enhance contribution of fish towards food and nutritional security.

Major activities to be taken up by the National Fisheries Development Board :

i) Intensive aquaculture in ponds and tanks.

ii) Enhancing productivity from Reservoir Fisheries.

iii) Brackish water Coastal Aquaculture.

iv) Mariculture.

vi) Sea Ranching.

vii) Seaweed Cultivation.

viii) Infrastructure for Post Harvest Programmes.

ix) Fish Dressing Centres and Solar Drying Fish

x) Domestic Marketing.

The proposed total outlay of the Board is Rs. 2100.00 crore. A sum of Rs. 30.00 crore has already been released to NFDB. A budgetary provision of Rs. 100.50 crore has been made for 2007-08. The Executive Committee under NFDB was constituted on 17.07.06 and the Governing Body on 2.8.06. The inaugural function and first meeting of the governing body of the board was held at Hyderabad on 9th September, 2006 and thus it became operational. So far the Governing Body of NFDB met twice and the six Executive Committee meetings were held. Guidelines for undertaking various activities with assistance from NFDB have been formulated.

Department of Agricultural Research and Education

The Department of Agricultural Research and Education (DARE), Ministry of Agriculture provides government support, service and linkage to the Indian Council of Agricultural Research (ICAR) and is responsible for coordinating research and educational activities in the field of agriculture, animal husbandry and fisheries. Also, it helps to bring about inter-departmental and inter-institutional collaboration with national and international agencies engaged in agriculture and allied sectors.

Indian Council of Agricultural Research

The Indian Council of Agricultural Research (ICAR) is an apex national organization for conducting and coordinating research and education in agriculture including animal husbandry and fisheries. The Council undertakes research on fundamental and applied aspects in traditional and frontier areas to offer solutions to problems related to conservation and management of resources, productivity improvement of crops, animals and fisheries. It plays a pivotal role in developing new technologies in agriculture and allied sectors and performs the functions of introduction and exploration of genetic resources of plants, animals and fisheries.

Agricultural Research

The Council has its headquarters at New Delhi and a vest network of Institutes all over the country consisting of 48 Institutes including 4 national Institutes with Deemed to be University status; 5 national Bureaux; 32 national Research Centres; 12 Project Directorates; and 62 All India Coordinated Research Projects (AICRPs). For higher education in agriculture and allied fields there are 39 State Agricultural Universities and One Central Agricultural University at Imphal besides 4 Deemed to be Universities.

Research, Education and Extension Activities of the ICAR

The activity spectrum and the highlight of research, education and extension in different fields are submitted below :

(1) Crop Sciences

During 2006, 73 new varieties of different field crops were released by Central Varietal Release Committee and 115 varieties were released by different State Varietal release Committee. The crop improvement programme includes development of high yielding varieties of wheat, improvement programme includes development of high yielding varieties of wheat; improvement of high breeds in maize; sorghum and pearl millets; popularization of winter maize; high yielding and early duration varieties in mungbean and urdbean; high breeds in caster; and development of short duration varieties of pigeon-pea. Nearly 6260 tonnes of breeder seed of different crops were produced and distributed as per the state indents so that farmers could get a quality

seed at the appropriate time. A project on seed production in crops and fisheries has been launched by the government in 2005-06.

An eco-friendly IPM approach in wheat was applied by DWR, Karnal. IPM module being promoted, is targeted at the pests like termites and aphids. IPM technology in sorghum based on seed treatment with neem oil @ 5ml / kg seed effectively controlled shoot fly and stem borer. Integrated Pest Management was effectively tried for all the major crops including cereals, pulses, oilseeds and cash crops.

A number of accessions were monitored for seed viability, seed quality and seed health after ten years of storage. 205 accessions of fruit crops, tuber crops, bulbous crops, spices and medicinal and aromatic plants were added to in vitro gene bank. Under DNA finger printing, presently database consists of 923 varieties of 16 crops.

(2) Horticulture

Significant Achievements are given below :

- Rejuvenation of unproductive old orchards of mango and litchi.
- A promising mango hybrid 'H-39' has attractive blush on fruit, high TSS (24 Brix), high carotenoid content (7.8 mg / 100g), firm pulp, regular bearing habit and dwarf nature.
- Embryogenic cell suspension cultures have been successfully developed in Rasthali and Ney Poovan varieties of banana for developing resistant transgenic plants against Fusarium wilt and resistant in Nendran against Sigatoka leaf spot.
- Developed 'Kashi Anmol', 'Kashi Early' and 'Kashi Vishwanath' varieties of chilli, 'IIVR-11' of okra, 'Kashi Kunwari' of cauliflower, 'Kashi Hans' of radish and 'Kashi Gauri' of cowpea.
- Developed onion variety 'Bhimraj' for kharif season.
- Developed 'Kufri Chipsona-3' and 'Kufri Himalini' varieties of potato.
- Developed 'Sree Padmanabha' variety of cassava and cashew promising hybrid 'H 1250' - VRI - 2 x VTH 40 / 1.
- Dual purpose variety (leaves as well as seed) of Corinander 'NRCSS ACr.1' and Fennel variety 'NRCSS AF'1' having high essential oil, high yielder and suitable for early transplanted crop.
- Identified INGR 07041 - a promising genotype of Kalmegh (Andrographis paniculata) - having compact plant type with high andrographolide content (%).
- Identified 'IIHRP-1' hybrid resistant to fusarium wilt in carnation.
- Productivity of apple, almond and apricot has been more than double under medium high density plantation with pollination, integrated nutrient and pest management, organic mulching and drip irrigation.
- Developed and launched the web based user-friendly software package entitled 'Digital Herbarium of Medicinal and Aromatic Plants in India'

Established gene banks in hill and tribal areas, of five walnut selections having nut weight of 18.63 to 27.16g and five selections having kernel weight of 10.69 to 12.76g which supercede the varieties developed by USA during last 150 years of walnut breeding.

(3) Natural Resource Management

Tista Basin in Sikkim has a unique combination of landscape and geo-agro climatic scenario that influence the formation of different kind of soils. Based on the visual interpretation of the satelite imagery and SOI toposheet total 17 watersheds were delineated. Total 62 soil series were identified and were; mapped into 63 soil mapping units. Soils are mainly Inceptisols, Ultisols, Mollisols and Alfisols. The hills are mostly covered with forests. Most of the cultivable land, except the narrow valley, is terraced and under crops like maize, millets, potato, pulses ginger and vegetables.

In a study for rehabilitation of eroded Shiwaliks at Chandigarh, maximum tomato yield was obtained through inoculation with bio-fertilizers. Applications of vermi-compost, FYM and bio-fertilizers to the eroded soil significantly improved soil moisture, respiration rate, phosphatse activity, beneficial microbes like azotobactor and phosphate solublizing bacteria.

Three years mean data (2003-2005) indicated that runoff (% of rainfall) was highest at Jogindar Nagar (28.6%) followed by Tinbed (25.6%) and Darang (16.3%) owing to their land slops of 124%, 106% and 81%, respectively. Cut and carry system (18% runoff) was the best compared to rotational (22.6%) and traditional (28.3%) grazing. Trenching in combination with vegetative barrier allowed only 8.2% of rain as runoff compared to 41.5% under control (no measure). Rainfall events of more than 50 mm, though quite less in number contributed 47.7%, 82.3% and 81.7% to total runoff at Darang, Joginder Nagar and Tinbed, respectively.

Rice was found to be moderate to marginally suitable in low and middle hill areas with bunding while maize was found to be moderate to maraginally suitable in ridge, low and mid mountains of mostly within 30-50% slope. Hand transplanting in rice and bed planting in wheat was the best treatment combination for maximizing rice (4.32 t ha--1); and zero till drilling in rice and conventional sowing in wheat was the best treatment combination for maximizing wheat (3.57 t ha-1) yield at Raipur.

In hilly soils of Uttranchal, deficiency of S was more wide spread in the soils of Chamba ADB as compared to those of Fakot ADB; the magnitude being 45.0 and 31 percent, respectively.

At Bhubaneshwar, four field crops (ragi, groundnut, sesame and black gram) were grown in the alleys (8 m wide) of two fast growing timber trees (Acacia mangium and Gmelina arborea at 625 trees / ha.). Crops yield in terms of ragi equivalent yield was highest in groundnut followed by sesame. In Guava based agri-hortisilvi, the highest mean fruit yield of guava was obtained in association with Dalbergia sissoo (3.4 t / ha). The net return (Rs. 8136 / -) as well as B: C ratio (2.25) were highest for seasmum in association with Dalbergia sissoo.

At Jabalpur, in guava and paddy-based system significantly higher rice grain yield (1.93 t ha-1) was recorded in 25% higher seed rate and fertilizer dose whereas lowest yield (1.1. t ha-1) was recorded in normal doses of seed rate and showed more than 90% survival and attained 6 m highest and 7.6 cm DBH within three years of its planting. Under this system, turmeric was successfully intercropped and a yield of 7. / 6 q / ha was realized.

At Jhargram (W. Bengal), bottle gourd grown as intercrop in Gmelina arborea + Sweet orange and G. arborea + Guuava - based agroforestry system gave maximum return (Rs. 74,150 and Rs. 73,480 / ha / year respectively during 2nd year of experimentation.

Effective control of Parthenium hysterophorus in grassland at Palampur was achieved with metsulfuron methyl 0.0905 per cent, metributzin 0.5 per cent, glyphosate 0.5 per cent 2,4-DEE 0.3 per cent and atrazine 0.3% when applied at 2-3 leaf stage of weed and recorded higher herbage yield.

In upland rice at jorhat pretilachlor 0.75 kg / ha + safener was found effective in reducing the weed growth and increasing the grain yield and was at par with the treatment where cowpea was grown as intercrop along with application of butachlor 1.0 kg / ha.

In direct seeded rice, cowpea grown as intercropping in additive series and harvested at 30 DAS followed by working with grubber at 40 DAS was found effective for control of weeds and realizing higher yield. State seed bed along with grubber at 20-25 DAS was also effective for control of weeds.

In rice-rice sequence, application of pretilachlor 0.75 kg ha-1 was found effective for control of weeds in autumn rice. In succeeding winter rice, narrow spacing (15 cm x 15 cm) followed by one hand weeding was equally effective with buttachlor 1.25 kg ha-1 + almix 4g ha-1.

(4) Agricultural Engineering

A number of agricultural implements such as, lug wheel puddler, inclined plate planter, garlic planter, tractor drawn ridger seeder / raised bed planter, three row rotary weeder, air sleeveboom sprayer, flail type chopper cum spreader, flail type forage harvester-cum chopper etc. have been developed as tractor operated machinery. Under power tiller-operated machinery, air assisted seed drill, groundnut digger and power weeder have been fabricated. In case of self-propelled machinery, self propelled biasi cultivator, mini combine, 8-row paddy transplanter, high clearance sprayer and vertical conveyor reaper have been developed. Under animal drawn machinery, raised bed planter, bullock drawn-sprayer, tool carrier etc. have been developed. Ergonomic studies w.r.t. layout of tractor operator's workplace have been carried out. The tractor seat has been designed based on the enthropometric data collected of about 5500 male agricultural workers.

Optimisation of process parameters for hulling of pigeonpea, cleaner-cum-grader for light seeds, curry leaf stripper, model for prediction of maturity of mango on tree, process technology for making aonla beverage, sunflower kernel based confectionery products, process technologies for value added products from pomegranate, technology for soy-millet biscuits, guava leather / bar, fish container mounted on cycle rickshaw hand operated aonla pricking machine and seed pelletiser are significant achievements in post-harvest engineering technology.

Improved cotton saw gin, low cost silver making machine, pilot plant for particle board from cotton plant stalks, value-added textile from sunhemp fibres, warm fabric (shaw) using bulked yarn made from jute polyter blends, small scale processing unit, pilot plant for lac have also been developed.

A family size floating done type biogas plant for solid-state digestion of cattle dung has been designed. Technology for enrichment of biogas digested slurry, annerobic digestion of crop residues, biodiesel production and jute caddies briquettes as an alternative fuel has been developed.

(5) Animal Sciences

India has a large livestock and poultry wealth comprising about 485 million livestock that includes 185 million cattle, 98 million buffaloes, 62 million sheep, 124 million

goats, 14 million pigs and 489 million poultry. Some of the major achievements including activities in hill and tribal areas are detailed below.

Based on the structure of cattle population in the Gaushalas, a new model, was developed for conservation of cattle in Gaushalas. Four Gaushalas have implemented the model by separating out the best cows in their herd and permitting controlled breeding by bulls of the same breed.

The synthetic breed development programme through cross breeding continued during the current year also. A total of five hundred sixty six (566) male calves were produced through elite mating at 22 military Farms in different years and were sent to Bull rearing Unit (BRU), Meerut for rearing and future bull production. Presently, Project Directorate on Cattle has 305 doses of pure HF semen and 4,08,179 doses of Frieswal semen in the gene bank.

129 genetically superior Murrah breeding bulls have so far been selected from various centres of the Project on Murrah breed and their semen was frozen for progeny testing programme. At present 4,88,555 doses of frozen semen from genetically superior bulls are in stock. :Elite herds of Nili-ravi, Surti, jaffarabadi, Bhadawari, Pandharpuri, Godavari and swamp buffaloes have been established.

Genetic improvement of Jamunapari and Barbari goats is being carried out through selective breeding in the nucleus flock. Use of bucks selected on the basis of index value combining 9 month body weight and 90 day’s milk yield of the dam indicated improvement in both milk yield and body weight.

Besides improving indigenous sheep through selection, improved breeds / strains like Bharat Merino, Avikalin and GaroleX Malpura were developed for enhanced meat production.

Genetical stability in terms of litter size at birth through inter se mating in 50% Hampshire (11th generation) and 75% Hampshire (10th generation) was recorded to be 6.67 and 6.91 respectively in the 1st crop and 8.69 and 8.1 respectively in 2nd crop i.e. from the tried sows in eight states. A survey on pig production status in North Eastern hill region was also carried out.

Breeding and production of German Angora rabbit for wool and New Zealand White (NZW), White Giant (WG), Grey Giant (GG), Soviet Chinchilla (SC), Dutch and Black Brown (BB) for broiler purposes were taken up in sub-temperate region of Himalayan hills to support small farmers' income.

In order to address the issue of developing suitable poultry birds for backyard rearing, ICAR has developed two breeds - Vanaraja for dual purpose and Gramapriya for egg type with a record production of 165 eggs against 65 eggs per annum from indigenous birds. Several backyard units were established at farmers field in the hill states of north east India.

Modulation of Prolactin hormone in blood using active immunizing agent like Vasoactive Intestinal Peptide (VIP) has shown to reduce the number of pause days in White Leghorn birds leading to increased egg production upto 4%.

The production and reproductive performance of cattle and buffaloes and their disease resistance ability was enhanced by supplementing area specific mineral mixture. Trials showed significant increase in growth rate and milk production of cattle and buffaloes to the extent of 20-30%.

Feeding total mixed ration to mithum (Bos frontalis) incorporating perennial tree leaves like Ficus hirta and herb like Borrena hirticulata up to 30 percent of total

mixed ration showed no adverse effects on nutrient utilization and growth performance, and therefore, recommended for stall fed Mithuns. Feed blocks were prepared at NRC on Mithun, Nagaland by incorporating urea treated paddy straw and concentrate mixture at 70:30 ratio. Feeding of these blocks showed better growth rate, nutrient utilization and nitrogen retention.

Considering dwindling yak population and also the need for larger number of yaks for the highlanders, embryo transfer technology in yak was tried for the first time with success.

In order to ensure faster diagnosis of important diseases, nucleic acid based discase diagnostic techniques developed and applied besides monitoring the sero-prevalence from infectious diseases of economic importance. Avian influenza in birds in the country as a whole was investigated and controlled successfully through use of diagnostics and vaccines developed at High Security Animal Disease Lab, Bhopal.

Parasitic disease diagnostic Kits for use by field veterinarians were developed using real time PCR and ELISA technique.

(6) Fisheries

Fisheries represent an important and fast growing food production sector in India that contributes more than 1% to the National GDP and 4.7% to the agricultural GDP With an annual production of 6.57 million tonnes from marine and inland waters, the country is the third fish producer in the world and the second largest producer of inland fish, next only to China. Annual export earnings form fish and shellfish are about Rs. 8,357 crore, accounting for nearly 20% of the agricultural export. Fish is a health food that is relatively cheap and affordable to the poor.

Major technological interventions that drove this developement in the freshwater aqaculture segment are induced breeding of major carps, catfishes and other fresh water finfishes; fish farming technologies of carps, mahseers and snow trouts for upland ecosystems and commercialization of fish feeds for inland aquaculture. In recent years, genetically improved rohu with a growth enhancement up to 17% per generation has also been developed. Through cryopreservation of sperm and eggs of freshwater fishes, many constraints of timely availability of sperm and eggs have been removed. Breeding of giant freshwater prawn, Macrobrachium rosenbergii, using inland saline waters, has been achieved, opening up possibilities for utilizing the vast tracts of such water bodies existing in different parts of the country. Polymorphic microsatellite and allozyme markers have been developed for fifteen fish species and Macrobrachium rosenbergii and a database containing karyomorphological information on 126 finfish species from 34 families and 9 orders is in place. In the riverine fisheries front, stock structure of fishes was analysed using allozyme and mircro satellite. PCR-based diagnostic capability has been developed for exotic OIE listed pathogens and guidelines developed for introduction of aquatic Exotics and Quarantine procedures. Seed production technology has been developed for the two inland and three marine ornamental fishes. In resevoir fisheries, high production levels of 220 kg / ha / year have been achieved from small reservoirs as against the national average of 20 kg / ha / year.

In marine fisheries, breeding of sand lobster has been achieved in captivity and Iarval rearing protocols have been developed for honey comb gruper, Epinephehus merra. In vitro marine pearl production through tissue culture technique in Indian pearl oyster, Pinctada fucata and abalone, Haliotis varia provides opens up new avenues for marine pearl culture. The sea cucumber, Holothuria scabra has been bred

in captivity and its seed used for sea ranching. A database on about 2,420 finfishes and shellfishes including of the Indian waters including 46 stocks of commercially important ones has been created. In the coastal aquaculture segment, new methods have been developed for detection of White Spot Disease in shrimp as also RT-PCR technique for diction of Yellow Head Virus. Seed production technology has been developed for kuruma shrimp, Marsupenaeus japonicus, a candidate species for diversification. Culture of banana shrimp, Penaeus merguenis has been demonstrated in Billamora, Gujarat. A technology package for hatchery seed production of sea bass has been developed paving the way for it commericialization.

New designs for fuel-efficient, cost-effective and eco-friendly fishing craft and gear are now available. National standards have been developed for quality assurance in fishery products. Technology for producing chitin and chitosan from shrimp head and shell has been commercialized. HACCP-based package has been developed for the practices for quality control of fish products. Many new value-added products have been produced from cuttlefish, squids, threadfin breams and carps including reportable flexible pouch technology for fish products. V form otter boards, Turtle Excluder device (TED) and square mesh cod ends are the new fishing craft and devices developed for eco- friendly marine fishing.

(7) Agricultural Education

In Agricultural Education several new initiatives have been taken to build a strong scientific base for research and technology transfer. Recommendations of the IV Deans Committee addressing quality and relevance of education by reorienting course curricula and syllabi for employability of graduates are being implemented in agricultural universities. For quality assurance in agricultural education 14 agricultural universities have already been accredited and several others are under the process of accreditation. With an objective of providing skill oriented hand-on-training to student, 138 experiential learning units have been established in 43 agricultural universities. For engendering education by encouraging women candidates for higher agricultural education, 60 new girls' hotels were constructed in agricultural universities. Similarly, for global visibility of our education system, 12 new international students' hotels were constructed and during the academic year 2007, yearly 300 students from 25 countries were admitted in various degree programmes of agriculture and allied sciences.

For building global visibility in research and education, 28 Niche Areas of Excellence initiated in universities in their area of attained capabilities like competitiveness and nationalized character in various degree programmes was achieved through All India Entrance Examination for 15 per cent seats at undergraduates level and 25 per cent at post-graduates level in agricultural universities. Scholarships and financial assistance was provided to students for Rural Awareness Work Experience, Internship B.V.Sc & A.H. students, merit-cum-means scholarship, National Talent Scholarship (undergraduate programme), junior Research Fellowship (master's programme) and Senior Research scientists. Nearly 150 HRD training courses of 10 days to 4 weeks duration were organized annually in which about 300 persons participated. Basic and strategic research in agriculture is encouraged through 25 national fellow and 10 national professional chairs. ICAR also facilitates logical completion of work that remains in hand at the time of superannuation of scientists by providing 50 emeritus scientists awards. Incentive and encouragement is provided to the faculty who attain excellence in teaching

through 3-5 Best Teacher Awards annually per university. Training, consultancy, research and policy support has been provided by the National Academy of Agricultural Research Management through induction training programme to entry level scientists, other training programmes, off-campus programmes, workshops and seminars.

(8) Agricultural Extension

The Council has established a network of 533 Krishi Vigyan Kendras (KVK) and SAUs, ICAR institutes, NGOs, State Governments and other education institutions, aiming at assessment, refinement and demonstration of technology / product. These KVKs conducted 4109 on-farm trials in order to identify frontline demonstrations to establish the production potentials of improved agricultural technologies on the farmers' fields. The KVKs organized 30672 training programmes benefiting 8.16 lakh women, 1.59 lakh rural Youth and 0.97 lakh extension personnel on various aspects of crop production crop protection, livestock production and management, fishery, resource management and other related areas. The beneficiaries of KVKs from the training programme also includes 2.27 lakh women farmers, 0.60 lakh rural girls and 0.21 lakh women extension personnel. In order to create awareness on improved agricultural technologies, the KVKs organized a large number of extension programmes including 41.90 lakh farmers. In addition, 8.482 newspaper coverages, publication of 2,231 popular articles and 6,075 extension literatures, and 3,786 and / TV talks were taken by the KVKs. The KVKs produced 87,782 quintal of seeds, 71.98 lakh saplings / seedlings of fruits, vegetables, spice, medieinal plants ornamental plants, planation crops and forest species and 29.98 lakh livestock strains and fingerlings for availability to farmers, besides production of bio-fertilizers, bio-pesticides and bio-agents.

(9) National Agricultural Innovation Project

Under NAIP, the concept notes submitted under competitive mode are under review and 7 projects have been approved and about 33 projects are under different stages of advanced processing. The projects approved under research on Sustainable Rural Livelihood Security (Component-III) cover 25 destruction the seven north eastern states, Jammu & Kashmir, Himachal Pradesh, Uttranchal, Maharashtra and Andhra Pradesh. The approved projects under Basic and Strategic Research (Component-IV) include arsenic in food chain, fixation of heterosis and plants and genomic analysis of cotton boll fibre.

(10) National Fund for Basic and Strategic Research

Under this scheme (of ICAR), 21 projects have been approved in the frontier areas of agricultural sciences covering botic and abotic stress management in rice, soreghum, pulse, oilseeds and cutton, animal improvement in buffalo, Immune response in cattle, prolificacy in black Bengal goat, mitigation of methane emission and productivity enhancement in dairy animals and targeted gene integation in rice and cotton.

(11) Research for Hill and Tribal Regions

ICAR through the Vivekananda Paravatiya Krishi Anusandhan Sansthan (VPKAS), Almora, the ICAR Research Complex for North-Eastern Hills Regions, Umiam, Meghalaya and the Central Agricultural Research Institutes (CARI), Portblair evolve technologies to meet the needs of tribals and hill farmers. These technologies are

intended to improve their social-economic status and to help them acquire special skills through vocational training in traditional and non-traditional crops, agro-forestry, apiculture, sericulture, horticulture, animal husbandry, poultry and fisheries.

During 2006, 9 varieties of different crops were released for Uttarakhand, HP, J&K and North-Eastern Hills by VPKAS Almora. Development of water resource by harvesting surface runoff and perennial hill streams of LDPE lined poly-tanks and protected cultivations of off-season vegetables utilizing the harvested water have helped farmers in Almora District. Similarly microirrgation system (MIS) helped initilizing water efficiently in National District. VPKAS, Almora also designed a user-friendly low cost light trap of efficient mass trapping of beetles.

A detailed digitiszed climatical as covering all growing seasons was prepared for Meghalya by the ICAR Research Complex for NEH Region. A genotype-independent multiple shoot induction protocol for pigeon-pea was developed. Three varieties of Kiwi fruit were successfully propagated. The Institute has developed raised and sunken bed technology for increasing cropping intensity using marshy lands. A seed drill was developed for high lope condition simple multiplex PCR for rapid diagnosis of sex in ducks and duck embryos was developed. Captive breeding of chocolate mahaseer was achieved using the brood stocks from Meghalya.

CARI, Portblair found five local strains of Pseudomonas species which proved effective as bio control agents against pathogens of solanaceous vegetables. Sesbania aculeta inter-cropping in wet seeded rice proved beneficial in The Islands. Propionate chelated organic trace mineral supplementation improved the daily milk production in crossbred cows. The institute identified enterprise combinations for slapping valley and valley areas. Also, diverse fishery resources of Andaman and Nicobar Islands were documented.

5 Art and Culture

THE Ministry of Culture plays a vital role in the preservation and promotion of art and culture. Its aim is to develop ways and means by which basic cultural and aesthetic values and perceptions remain active and dynamic among the people. It also undertakes programmes for the promotion of various manifestations of contemporary art. The Department is a nodal agency for commemorating significant events and celebrating centenaries of great artists.

VISUAL ARTS

LALIT KALA AKADEMI

To promote and propagate understanding of Indian art, both within and outside the country, the Government of India established Lalit Kala Akademi (National Akademi of Arts) at New Delhi in 1954. The Akademi has regional centres called Rashtriya Lalit Kala Kendras at Lucknow, Kolkata, Chennai, Garhi in New Delhi and Bhubaneswar with workshop facilities in painting, sculpture, print-making and ceramics.

Since its inception, the Akademi has been organising national exhibition of contemporary Indian art with 15 national awards, each of Rs 50,000. Every three years, the Akademi also organises Triennial India, an International exhibition of contemporary art in New Delhi.

The Akademi honours eminent artists and art historians every year by electing them as Fellows of the Akademi. To propagate Indian art outside, the Akademi regularly participates in International Biennials and Triennials abroad and also organises exhibitions of works of art from other countries. To foster contracts with artists from outside, it sponsors exchange of artists with other countries under the various Cultural Exchange Programmes and Agreements of the Government.

The Lalit Kala Akademi accords recognition to art institutions / associations and extends financial assistance to these bodies as well as State Academies. It also gives scholarships to deserving young artists belonging to its regional centres. Under its publication programme, the Akademi brings out monographs on the works of Indian contemporary artists in Hindi and English and books on contemporary, traditional, folk and tribal arts authored by eminent writers and art critics. The Akademi also brings out bi-annual art journals, Lalit Kala Contemporary (English), Lalit Kala Ancient (English) and Samkaleen Kala (Hindi). Apart from these, it brings out large size multi-colour reproductions of contemporary paintings and graphics from time to time. The Akademi has started a regular programme on research and documentation. Scholars are given financial assistance to undertake projects in contemporary projects on various aspects of Indian society and culture.

PERFORMING ARTS

MUSIC

Two main schools of classical music—Hindustani and Carnatic continue to survive through oral tradition being passed on by teachers to disciples. This has led to the existence of family traditions called gharanas and sampradayas.

DANCE

Dance in India has an unbroken tradition of over 2,000 years. Its themes are derived from mythology, legends and classical literature, two main divisions being classical and folk. Classical dance forms are based on ancient dance discipline and have rigid rules of presentation. Important among them are Bharata Natyam, Kathakali, Kathak, Manipuri, Kuchipudi and Odissi. Bharata Natyam though it derives its roots from Tamil Nadu, has developed into an all India form. Kathakali is a dance form of Kerala. Kathak is a classical dance form revitalised as a result of Mughal influence on Indian culture. Manipur has contributed to a delicate, lyrical style of dance called Manipuri, while Kuchipudi is a dance form owing its origin to Andhra Pradesh. Odissi from Orissa, once practised as a temple dance, is today widely exhibited by artistes across the country. Folk and tribal dances are of numerous patterns.

Both classical and folk dances owe their present popularity to institutions like Sangeet Natak Akademi and other training institutes and cultural organisations. The Akademi gives financial assistance to cultural institutions and awards fellowships to scholars, performers and teachers to promote advanced study and training in different forms of dance and music, especially those which are rare.

THEATRE

Theatre in India is as old as her music and dance. Classical theatre survives only in some places. Folk theatre can be seen in its regional variants practically in every region. There are also professional theatres, mainly city-oriented. Besides, India has a rich tradition of puppet theatre, prevalent forms being puppets, rod puppets, glove puppets and leather puppets (shadow theatre). There are several semi-professional and amateur theatre groups involved in staging plays in Indian languages and in English.

SANGEET NATAK AKADEMI

Sangeet Natak Akademi, India’s National Academy of Music, Dance and Drama, may be regarded as a pioneer in the process of creation of modern India that led politically to India’s freedom in 1947. The ephemeral quality of the arts, and the need for their preservation led to the adapting of a democratic system in which a common man had the opportunity to learn, practice and propagate the art. Within the first few decades of the twentieth century, public perception of responsibility for both preservation and development of the arts had started inclining towards the state.

The first comprehensive public appeal to government in this direction was made in 1945, when the Asiatic Society of Bengal submitted a proposal for the creation of a National Cultural Trust consisting of three academies - an Academy of Dance, Drama, and Music, an Academy of Letters, and an Academy of Art and Architecture.

The entire question was reconsidered after independence, in a Conference on Art held in Kolkata in 1949, and two Conferences, on Letters, and the other on Dance, Drama, and Music, held in New Delhi in 1951. These Conferences convened by the Government of India finally recommended the creation of three national academies: an Academy of Dance, Drama, and Music, an Academy of Letters and an Academy of Art.

The National Academy of Dance, Drama, and Music, named Sangeet Natak Akademi, was the first of these entities to be established by a resolution of the Ministry of Education, headed by Maulana Abul Kalam Azad, signed on 31 May 1952. On 28 January 1953, Sangeet Natak Akademi was inaugurated by the then President of India, Dr Rajendra Prasad.

The Akademi's charter of functions contained in the 1952 resolution was expanded along the original lines in 1961, when Sangeet Natak Akademi was reconstituted by the Government as a society and registered under the Societies registration Act of 1860 (as amended in 1957). These functions are set down in the Akademi's Memorandum of Association, adopted at its registration as a society on 11 September 1961.

Since its inception the Akademi has worked towards building up a unified structure of support for the practice of music, dance and drama in India. This support encompasses traditional and modern forms, and urban as well as rural environments. The festivals of music, dance and drama presented or promoted by the Akademi are held all over India. The great masters of the performing arts have been elected as Fellows of the Akademi. The Sangeet Natak Akademi Awards conferred annually on eminent artists and scholars are considered the most coveted honours in the field of the performing arts. Thousands of institutions across the country, including many in the remote areas, engaged in teaching or promotion of music, dance and theatre have received financial assistance for their work, from the Akademi, as do researchers, authors and publishers in relevant disciplines.

The extensive recording and filming of the performing arts carried on by the Akademi since its inception have resulted in a large archive of audio-and video-tape, 16-mm film, photographs and transparencies, and remains the single most important resource for researchers in the performing arts of India.

The Akademi's Gallery of Musical Instruments has a collection of more than 600 instruments of prominence and has been the source of a great deal of published documentation over the years. The library of Sangeet Natak Akademi has similarly attracted, and continues to attract, authors, students and researchers in these disciplines. Sangeet Natak, the Akademi's journal published since 1965, had proved to be one of the longest-running periodicals in its own domain, and has published the original work of both eminent writers as well as those of lesser known.

The Akademi also establishes and looks after institutions and projects of national importance in the performing arts. Chronologically, the Jawaharlal Nehru Manipuri Dance Academy in Imphal, the premier institution in Manipuri dance and music established in 1954, is the first of these institutions. In 1959 the Akademi established the National School of drama and in 1964 the Kathak Kendra, both being based in Delhi. The Akademi's ongoing projects of national importance are in Kutiyattam theatre of Kerala, which commenced in 1991 received recognition from UNESCO as a Master piece of oral and intangible heritage of Humanity in 2001. The project in Chhau dance of Orissa, Jharkhand and West Bengal began in 1994. The project support to Sattriya music, dance, theatre and allied arts of Assam was started in 2002.

As the apex body specialising in the performing arts, the Akademi also renders advice and assistance to the Government of India in the task of formulating and implementing policies and projects in the field. Additionally, the Akademi carries a part of the responsibilities of the state for fostering cultural contacts between various

regions in India, and between India and other countries. The Akademi has held exhibitions and major festivals in foreign countries. The Akademi has held exhibition and seminars in Hongkong, Rome, Moscow, Athens, Valladolid, Cairo and Tashkent and Spain. Major festivals of foreign countries like Japan, Germany and Russia have been presented by the Akademi.

The Sangeet Natak Akademi is at present an autonomous body of the Ministry of Tourism and Culture, Government of India and is fully funded by the Government for implementation of its schemes and programmes.

NATIONAL SCHOOL OF DRAMA

The National School of Drama (NSD) - one of the foremost theatre institutions in the world and the only one of its kind in India was set up by Sangeet Natak Akademi in 1959. Later in 1975, it became an autonomous organisation, totally financed by Department of Culture. The objective of NSD is to train students in all aspects of theatre, including theatre history, production, scene design, costume design, lighting, make-up, etc. The training course at NSD Art and Culture is of three years duration. Each year, 20 students are admitted to the course. The eligible applicants for admission to the course are screened through two stages. The Diploma of NSD is recognised by the Association of Indian Universities as equivalent to M.A. Degree for appointment as teachers in colleges / universities and for purposes of registration for Ph.D.

The School has a performing wing, a Repertory Company which was set up in 1964 with the dual purpose of establishing professional theatre on one hand and continuing with the regular experimental work on the other. The NSD has made a significant contribution in promoting children's theatre. The Theatre-in-Education Company (renamed as Sanskar Rang Toli) was founded in 1989 and has been actively involved in production of plays for children, organising summer theatre workshops in the schools of Delhi and also promoting children's theatre through Saturday Club. Since 1998, the School has organised National Theatre Festival for Children christened 'Jashne Bachpan' every year. The first ever National Theatre Festival christened Bharat Rang Mahotsav was held from 18 March to 14 April 1999 to commemorate the 50th year of India's Independence. Encouraged by the success of the first Bharat Rang Mahotsav, it has been made an annual feature.

To reach a vast majority of theatre artists in various states with diverse languages and cultural backgrounds, who cannot have access to the regular training course provided by the School, a short-term teaching and training programme titled 'Extention Programme' was started in 1978. Under this programme, the School organises workshops in collaboration with the local theatre groups/ artists and these programmes are invariably held in the local languages. The workshops could be broadly divided under three categories, Production Oriented Workshops, Production Oriented Children Workshops and Teaching and Training Programme in Theatre. The School has also set up a Regional Research Centre at Bangalore to cater to the theatrical needs of the four Southern States and Pondicherry.

Another important activity of the School is the publication of textbooks on theatre and arrange the translation of important books on theatre from English into Hindi.

SAHITYA AKADEMI

Sahitya Akademi is the Indian National Academy of Letters meant to promote the

cause of Indian literature through publications, translations, seminars, workshops, cultural exchange programmes and literary meets organised all over the country. The Akademi was founded in March 1954 as an autonomous body fully funded by the Department of Culture. It was registered as a Society in 1956 under the Societies Registration Act, 1860. The Akademi has recognised 24 languages. It has an Advisory Board for each of the languages that suggests various programmes and publications in the concerned languages. There are four Regional Boards to promote regional interaction among the languages of the North, West, East and South. Besides its Head Office in New Delhi, it has four offices : in Kolkata, Mumbai, Bangalore and Chennai. The Akademi has two Translation Centres at Bangalore and Kolkata, besides a Project Office at Shillong for promotion of oral and tribal literature and an Archives of Indian literature in Delhi. It maintains a unique multilingual library in New Delhi and at its regional offices at Bangalore and Kokata, having about 1.5 lakh books in over 25 languages.

The highest honour conferred by the Akademi on a writer is by electing him its Fellow. This honour is reserved for the 'Immortals of Literature' and limited to 21 at any given time. So far 66 writers have been elected Fellows of the Sahitya Akademi. It has so far recognised 850 authors and 283 translators with its Awards and Translation Prizes for distinguished contribution to literature, and given 31 Bhasha Sammans, awards meant to promote peripheral languages and Honorary Fellowships for foreign scholars who have done significant work in Indian literature. The Akademi publishes books in 24 languages including translations of Award-winning works, monographs on the great pioneers of Indian literature, histories of literature, Indian and foreign classics in translation, anthologies of fiction, poetry and prose, biographies, Register of Translators, Who's Who of Indian Writers, National Bibliography of Indian Literature and Encyclopedia of Indian Literature. So far, the Akademi has published over 4,000 books in these different categories. It has three journals, Indian Literature (bi-monthly in English), Samkaleena Bharatiya Sahitya (bi-monthly in Hindi) and Samskrita Pratibha (half-yearly in Sanskrit). Every year the Akademi publishes 250-300 books on an average. It has certain special projects like the Ancient Indian Literature, Medieval Indian Literature and Modern Indian Literature together constituting ten volumes of the best of Indian writing over five millennia. It has also launched a new project Encyclopedia of Indian Poetics.

Sahitya Akademi holds a number of regional, national and international seminars every year on various topics in literature, literary history and aesthetics. The Akademi also regularly holds Translation Workshops.

The Akademi holds an annual week-long 'Festival of Letters', usually in February with Award-giving ceremony, Samvatsar Lecture and a National Seminar. The Akademi also introduced a new series of programmes entitled Sur Sahitya as part of the Golden Jubilee celebrations in 2004-05.

SCHOLARSHIP AND FELLOWSHIP DIVISION

The Scholarship and Fellowship Division operates four schemes to provide monetary assistance to individuals engaged in promoting cultural activities in the country.

Scholarships to Young Artistes in different Cultural Fields : The Scholarships are awarded to young artistes in the fields of Indian Classical dances, Indian Classical Music, Theatre, Visual Arts and Folk, Traditional forms of Arts, etc. Under the Scheme, a total of 400 scholarships are awarded each year for a period of two years. The value of Scholarships is Rs. 2000 per month.

Artistes in the age group of 18-25 years are eligible to apply. The scholarships are awarded for taking advance training.

Fellowships to Outstanding Artistes in the fields of Performing, Literary and Visual Arts : Fellowships are awarded to the outstanding Artistes in the fields of Indian Classical Dances, Indian Classical Music, Theatre, Visual Arts, Folk, Traditional forms of Performing Arts and Literature. A total of 170 fellowships are awarded for a period of two years; out of this 85 are Senior fellowships having a value of Rs. 12000 per month and 85 are Junior fellowships having a value of Rs. 6000 per month. Artistes in the age bracket of 41 years and above are eligible to apply for Senior fellowship and artistes from 25-40 years of age can apply for Junior fellowships. The applicants who are employed in the Central Government / Undertakings / Government Organisations / UGC aided Colleges, etc., will be required to take study leave or any other kind of leave for a period of two years, if selected.

The Fellowships are awarded for undertaking research oriented projects. While both the academic research and performance related research are encouraged, the applicant is required to provide evidence of his / her capabilities in undertaking the project. The fellowships are not intended for providing training, conducting workshops, seminars or writing autobiographies / fictions, etc.

Award of Senior / Junior Fellowships in New Areas related to Culture : Fellowships are awarded in the fields of Indology, Epigraphy, Sociology of Culture, Cultural Economics, Structural and Engineering aspects of monuments, Numismatics, Scientific and Technical aspects of Conservation, Management aspects of Art and Heritage and Studies relating to application of Science and Technology in areas related to culture and creativity. A total of 19 fellowships are awarded each year; 11 Senior and 8 Junior. Post-graduates in the relevant field and in the age group of 41 years and above are eligible for Senior fellowships and eligibility age is 25-40 years for Junior Fellowships. The value of fellowships is Rs. 12000 per month and Rs. 6000 per month respectively.

The Senior and Junior fellowships are awarded for undertaking projects in the new areas with the objective to encourage application of modern ideas, principles, methodology and technology to art and culture related issues. The objective is to encourage analytical application of new research techniques, technologies and modern management principles to contemporary issues and problems in the art and culture related areas.

Scheme of Financial Assistance for Research Support to Voluntary Organisations Engaged in Cultural Activities : The scheme covers voluntary organisations which are engaged in cultural activities and are doing research in different aspects of Indian Culture as related to its traditions and philosophy, etc. They should have been functioning for at least three years and registered under the Societies Registration Act (XXI of 1860). Financial assistance is given for the following purposes : (a) Holding of conference, seminars and symposia on important cultural matters. (b) To meet expenditure on activities of development nature like conduct of surveys, pilot project, etc.

Grants for specific projects shall be restricted to 75 per cent of the expenditure, subject to a maximum of Rs. one lakh per project as recommended by the Expert Committee.

In the year 2004-05, 176 proposals were selected by the Expert Committee for financial assistance for research work to voluntary organisations.

RAMAKRISHNA MISSION INSTITUTE OF CULTURE, KOLKATA

The Institute was conceived in 1936 as one of the permanent memorials to Sri Ramakrishna (1836-1886) on the occasion of his first birth centenary. It was formally established on 29 January 1938 as a branch centre of the Ramakrishna Mission founded by Swami Vivekananda to propagate the message of Vedanta as propounded by Sri Ramakrishna whose basic teachings stressed: (i) the equality of all religions; (ii) the potential divinity of man; and (iii) service to man as a way of worshipping God - a new religion for mankind.

Dedicated to promote the ideal of the unity of mankind the Institute has endeavoured over the years to make people aware of the richness of the cultures of the World and also of the urgent need for inter-cultural appreciation, understanding and acceptance of each other's points of view - an approach which is conducive to international understanding at the global level and national integration at home. The key note of everything the Institute does is thus respect for others point of view and its assimilation and acceptance for one's own enrichment.

ANTHROPOLOGICAL SURVEY OF INDIA

The Anthropological Survey of India is a premier research organisation under the Ministry of Culture. It has completed 59 years of its splendorous existence and has adhered itself to its commitments to carry out anthropological researches in the area of bio-cultural aspects of Indian population in general and on those who are referred to as the "Weakest of the Weak" in particular. Besides this there are other pertinent activities of the Survey, which include collection, preservation, maintenance; documentation and study of ethnographic materials as well as ancient human skeletal remains. Over the years the Survey generated information from grass-root level through sustained research by its Head Office at Kolkata and also its seven Regional Centres, one Sub-regional Centre, one permanent field station and eight other field stations located in various parts of the country, besides a Camp Office at New Delhi.

During the Tenth Plan following National Projects are being studied namely, Cultural Dimension of Tourism in the Biosphere Reserve in addition to the locations of tourists interest.

ARCHAEOLOGICAL SURVEY OF INDIA

The Archaeological Survey of India (ASI) was established in 1861. It functions as an attached office of the Department of Culture. The organisation is headed by the Director General.

The major activities of the Archaeological Survey of India are :

i) Survey of archaeological remains and excavations;

ii) Maintenance and conservation of centrally protected monuments sites and remains;

iii) Chemical preservation of monuments and antiquarian remains;

iv) Architectural survey of monuments;

v) Development of epigraphical research and numismatic studies;

vi) Setting up and re-organisation of site museums;

vii) Expedition abroad;

viii) Training in Archaeology;

ix) Publication of technical report and research works.

There are 21 Circles and 3 Mini-Circles through which the Archaeological Survey of India administer the work of preservation and conservation of monuments under its protection.

Under the Ancient Monuments and Archaeological Sites and Remains Act, 1958, the ASI has declared three thousand six hundred and fifty six monuments / sites to be of national importance in the country which includes twenty one properties that are inscribed on the World Heritage List by UNESCO. Since its establishment one hundred and forty four years ago, the ASI has grown into a large organisation with an all India network of offices, branches and circles.

Three sites, namely, Champaner - Pavagarh Archaeological Park in Gujarat, Chhatrapati Shivaji Terminus (formerly Victoria Teminus) Station in Mumbai and the Brihadisvara temple complex, Gangakondacholapuram and the Airavatesvaira temple complex, Darasuram as an extension to the Brihadisvara temple complex, Thanjavur (now commonly called as the Great Living Chola Temples) have been inscribed on the World Heritage List of UNESCO in 2004.

Nomination dossiers for the following sites have been sent to the World Heritage Centre for inscription on the World Heritage List of UNESCO : (i) Shri Harminder Sahib (Golden Temple) at Amritsar, Punjab. (ii) Majuli Island in Mid-stream of river Brahmaputra in Assam. (iii) Valley of Flowers as an extension to the Nanda Devi National Park in Uttaranchal. (iv) Red Fort, Delhi (a deferred nomination).

The total number of individual structures being maintained by the ASI is over five thousand.

Underwater Archaeology Wing : Search, study and preservation of cultural heritage lying submerged in inland or territorial waters are among the principal functions of the Underwater Archaeology Wing. It carries out exploration and excavation in Arabian Sea as well as in Bay of Bengal.

Science Branch : The Science Branch of the Survey with its headquarters at Dehradun and field laboratories in different parts of the country carries out chemical preservation of monuments, antiquities, manuscripts, paintings, etc.

Laboratories of Science Branch at Dehradun have undertaken the following Scientific Projects : (1) Evaluation of new materials as preservative coatings and strengthened for stone, terracotta, bricks & adobe structures. (2) Scientific studies related to conservation of ancient lime plaster. (3) Evaluation of physical characteristics of plaster cement with addition of rapid hardening plaster cement in different proportions.

Horticulture Branch : The Horticulture Branch of the ASI maintains gardens in about two hundred and eighty seven centrally protected monuments / sites located in different parts of the country. The branch provides periodic plants to be used in gardens by developing base nurseries at Delhi, Agra, Srirangapatna and Bhubaneswar.

Epigraphy Branch : The Epigraphy Branch at Mysore carries out research work in

Sanskrit and Dravidian languages while the one at Nagpur carries out research work in Arabic and Persian.

Expeditions Abroad : The ASI has taken up the conservation project of Ta Prohm, Cambodia under the ITEC programme of Ministry of External Affairs with an outlay of Rs. 19.51 crore. The conservation project has been started as per the assurance of the Hon'ble Prime Minister of India, during his visits to Cambodia in April and November 2002, on the request of the Royal Government of Cambodia for India's assistance in Conservation and Restoration of Prasat Ta Prohm. The conservation project is for a period of ten years and is to be completed in five phases.

The ASI has commenced the conservation project from January 2004 onwards and it was formally launched in February 2004 in Cambodia.

NATIONAL ARCHIVES OF INDIA

The National Archives of India (NAI), New Delhi known until Independence as Imperial Record Department was originally established in Kolkata on 11 March 1891. It is the official custodian of all non-current record of permanent value to the Government of India and its predecessor bodies. It has a Regional Office at Bhopal and three Record Centres at Bhubaneswar, Jaipur and Pondicherry.

Major activities of the Archives include: (1) making public records accessible to various Government agencies and research scholars; (ii) preparation of reference media; (iii) preservation and maintenance of records and conducting of scientific investigations for the said purpose; (iv) evolving records management programmes; (v) rendering technical assistance to individuals and institutions in the field of conservation of records; (vi) imparting training in the field of archives administration, records management, reprography, repair and conservation of records, books and manuscripts at professional and sub-professional levels; and (vii) creation and promotion of archival consciousness in the country by organising thematic exhibitions.

The National Archives of India provides financial assistance to States / Union Territories Archives, Voluntary Organisations and other custodial institutions, so that the documentary heritage is preserved and archival science is promoted.

NATIONAL MISSION FOR MANUSCRIPTS

The National Mission for Manuscripts was launched in February, 2003 by the Ministry of Culture to save the most valuable of our cultural inheritance, i.e., manuscripts. An ambitious five year Project, the Mission seeks not merely to locate catalogue and preserve India's manuscripts but also to enhance access, spread awareness and encourage their use for educational purposes. The Web Site of National Mission for Manuscripts is www.namami.nic.in.

NATIONAL MUSEUM

The National Museum, which was set up in 1949 and which has been functioning as a subordinate office under the Ministry of Culture since 1960, houses over 2.6 lakh art objects dating from prehistoric era onwards. The main activities of the Museum are as follows: Exhibitions, Reorganisation / Modernisation of Galleries, Educational Activities and Outreach Programmes, Public Relations, Publications, Photo Documentation, Summer Holiday Programme, Memorial Lectures, Museum Corner, Photo Unit, Modelling Unit, Library, Conservation Laboratory, and Teaching and Workshop.

NATIONAL MUSEUM INSTITUTE OF HISTORY OF ART, CONSERVATION AND MUSEOLOGY

The National Museum Institute of History of Art, Conservation and Museology, New Delhi, an autonomous organisation fully funded by the Ministry of Culture was established and declared a Deemed to be University in 1989. This is the only Museum University in India and is presently functioning at the first floor of National Museum, New Delhi. As per its Memorandum of Association, the Director General, National Museum is the ex-officio Vice-Chancellor of this University.

Main objectives : (a) To provide education and training in the specialised areas of Art History, Conservation and Museology leading to the award of M.A. and Ph.D. Degrees in these three disciplines. (b) A few short-term courses - India Art and culture, Art Appreciation and Bhartiya Kalanidhi (Hindi Medium) are also conducted to popularise the Indian culture. (c) To organise seminars / workshops, conferences and special lectures on Museum Education, Art and Culture in a befitting manner so as to open new areas in this field.

NATIONAL LIBRARY

The National Library, Kolkata was established in 1948 with the passing of the imperial Library (Change of Name) Act, 1948. The basis functions of the Library, which enjoys the status of an institution of national importance, are : (i) Acquisition and conservation of all significant production of printed material (to the exclusion only of ephemera) as well as of manuscripts of national importance; (ii) Collection of printed material concerning the country, no matter where this is published; (iii) Rendering of bibliographical and documentary services of current and retrospective material, both general and specialised. (This implies the responsibility to produce current national bibliographies and retrospective bibliographies on various aspects of the country); (iv) Acting as referral centre, purveying full and accurate knowledge of all sources of bibliographical information and participation in international bibliographical activities; and (v) Acting as a centre for international book exchange and internal loan.

CENTRAL SECRETARIAT LIBRARY

The Central Secretariat Library (CSL) originally known as Imperial Secretariat Library, Kolkata was established in 1891. Since 1969 the Library has been housed at Shastri Bhawan, New Delhi. It has a collection of over seven lakh documents mainly on Social Sciences and Humanities. It is a depository of Indian Official Documents, Central Government and has a strong collection of State Government documents also.

The collection of Area Studies Division is unique in which books have been arranged according to geographical area. Besides this, its biographical collection is very large and has an extremely rich rare book collection.

The CSL is a Microfilm repository under Microfilming of Indian Publication Project (MIPP) having large number of microfilm collection.

The CSL is mainly responsible for overall collection and development on all subjects useful in policy decision-making process and is also responsible to build its collection on developmental literature. It provides all possible readers' services to Central Government Officials and other research scholars visiting the Library from all over India. In the recent past CSL has undertaken the development of IT

based products by digitizing the Government of India Gazette, Committee and Commission Reports and has also developed the OPAC system for its collection.

The Library has two branches, namely, Hindi and Regional Languages Wing popularly known as Tulsi Sadan Library, Bahawalpur House, New Delhi that houses about 1.9 lakh volumes of Hindi and 13 other constitutionally approved Indian Regional Language books and a Text Book Library located at R.K. Puram, New Delhi which caters to the needs of wards of Central Government Employees of Under Graduate level.

The CSL has recently launched, a portal "India Information Gateway" and its Web Site http://www.csl.nic.in was inaugurated by Secretary, Ministry of Culture on 21 March 2005.

CENTRE FOR CULTURAL RESOURCES AND TRAINING

The Centre for Cultural Resources and Training (CCRT) is one of the premier institutions working in the field of linking education with culture. The Centre was set up in May 1979 as an autonomous organisation by the Government of India. Today it operates under the administrative control of Ministry of Culture, Government of India. With headquarters in New Delhi, it has two regional centres at Udaipur and Hyderabad.

The broad objectives of CCRT have been to revitalise the education system by creating an understanding and awareness among students about the plurality of the regional cultures of India and integrating this knowledge with education. The main thrust is on linking education with culture and making students aware of the importance of culture in all development programmes. One of the CCRT's main functions is to conduct a variety of training programmes for in-service teachers drawn from all parts of the country. The training provides an understanding and appreciation of the philosophy, aesthetics and beauty inherent in Indian art and culture and focuses on formulating methodologies for incorporating a culture component, in curriculum teaching. This training also stresses the role of culture in science and technology, housing, agriculture, sports, etc. An important component of training is to create awareness amongst students and teachers of their role in solving environmental pollution problems and conservation and preservation of the natural and cultural heritage. To fulfill these objectives, the Centre organises variety of training programmes for teachers, educators, administrators and students throughout the country.

The CCRT organises academic programmes on Indian art and culture for foreign teachers and students on special request. Workshops are conducted in various art activities like drama, music, narrative art forms, etc., to provide practical training and knowledge in the arts and crafts. In these workshops, teachers are encouraged to develop programmes in which the art form can be profitably utilised to teach educational curriculum.

The CCRT organises various educational activities for school students, teachers and children belonging to governmental and non-governmental organisations under its extension and community feedback programmes which includes educational tours to monuments, museums, art galleries, craft centres, zoological parks and gardens, camps on conservation of natural and cultural heritage, camps on learning crafts using low cost locally available resources, lectures and demonstrations by artists and experts on various art forms, demonstrations by artists and craft persons

in schools. These educational activities emphasise the need for the intellectual and aesthetic development of the students.

Over the years, CCRT has been collecting resources in the form of scripts, colour slides, photographs, audio and video recordings and films. Each year the CCRT's documentation team conducts programmes in different parts of the country with the objective of reviving and encouraging the art and craft forms of rural India. The Centre also prepares publications, which attempt at providing an understanding and appreciation of different aspects of Indian art and culture.

One of the most important functions of CCRT is to implement the Cultural Talent Search Scholarship Scheme, which was taken over from the Department of Culture in 1982. The scheme provides scholarships to outstanding children in the age group of 10 to 14 years, studying either in recognised schools or belonging to families practicing traditional performing or other arts to develop their talent in various cultural fields particularly in rare art forms. The scholarships continue till the age of 20 years or the first year of a University degree. About 350 scholarships are offered every year.

The Centre has instituted CCRT Teachers Award which is given every year to selected teachers for the outstanding work done by them in the field of education and culture. The Award carries with it a citation, a plaque, an angavastram and a cash prize of Rs 10,000.

ZONAL CULTURAL CENTRES

Zonal Cultural Centres have been conceptualised with the aim of projecting cultural kinship which transcend territorial boundaries. The idea is to arouse awareness of the local cultures and to show how these merge into zonal identities and eventually into the rich diversity of India's composite culture. These centres have already established themselves as a premier agency in the field of promotion, preservation and dissemination of culture in the entire country. They are not only promoting performing arts but also making a significant contribution in the associated field of literary and visual arts. The seven zonal cultural centres were established under this scheme during 1985-86 at Patiala, Kolkata, Thanjavur, Udaipur, Allahabad, Dimapur and Nagpur. The participation of states in more than one zonal cultural centre according to their cultural linkage is a special feature of the composition of the zonal centres. With the approval of the Cabinet a Corpus fund for each ZCC was created by Government of India and the participating State Governments to enable the ZCCs to finance their activities from the interest earned on the investment of this Corpus Fund. The Government of India has provided a grant of Rs five crore to each ZCC and each constituent state has been provided Rs one crore. In the event of a State being a member of more than one centre, the State's contribution would not exceed Rs one crore in all. From 1993 all the Zonal Cultural Centres have been sending their folk artistes for participation in the Republic Day Folk Dance Festival. This festival is inaugurated by the Hon'ble President of India every year on 24th / 25th January at the Talkatora Indoor Stadium. The Festival provides a unique opportunity for folk artistes to perform at the national level. A Crafts Fair is also held in the various zones along with the Republic Day Folk Dance Festival. Master craftsmen and artisans from various ZCCs participate in this Crafts Fair. The Crafts Fair has been providing a valuable opportunity for crafts persons from different parts of India to exhibit their products as well as their process of manufacturing directly to the customers. Documentation of various Folk and Tribal Art forms

especially those which are rare and on the verge of vanishing, is one of the main thrust areas of the ZCCs. Under the National Cultural Exchange Programme (NCEP), exchanges of artists, musicologists, performers and scholars between different region within the country take place. It has been extremely useful in promoting awareness of different tribal/folk art forms in different parts of the country and thus a very useful expressions of the concept of unity within diversity of our country. A scheme of Theatre Rejuvenation has been started to provide an opportunity to students, actors. artists, directors and writers to perform on a common platform and to interact with each other. To promote new talents in the field of music and dance a scheme of Guru Shishya Parampara has been introduced where masters will be identified in the zone, pupil assigned to them and scholarship provided for the purpose. The ZCCs also provide promotion and marketing facilities to craftsmen through Shilpgrams. ZCCs have also started a new scheme for recognition and encouragement of young talents in which each ZCC will identify the different performing/folk art forms in their area and select one or two talented artists in each of the fields.

NATIONAL GALLERY OF MODERN ART

The National Gallery of Modern Art (NGMA), New Delhi was founded in 1954. The main aim of the NGMA is the promotion and development of contemporary Indian Art. The collection of NGMA inter-alia comprises 17858 works of art, representing about 1748 contemporary Indian artists. The collection has been built up mainly by purchase and also by gift. The NGMA's important collections include paintings, sculpture, graphic arts and photographs. NGMA organises exhibitions from its collection and under Cultural Exchange Programme periodically. Several colour reproductions have been brought out. The objective of NGMA is to help people look at the works of modern art with understanding and sensitivity. Keeping this in view, NGMA Mumbai was inaugurated in 1996, while a new one is being set up at Bangalore.

INDIRA GANDHI NATIONAL CENTRE FOR THE ARTS

The Indira Gandhi National Centre for the Arts (IGNCA) is a premier national institution engaged in the pursuit of knowledge on arts and culture and in the exploration of relationships of arts and culture with various disciplines of learning and diverse aspects of life. Established in 1985 in the memory of the Late Prime Minister Smt. Indira Gandhi, it is involved in multifarious activities such as research, publication, training, documentation, dissemination and networking and is poised to grow into a large repository of information pertaining to the arts in India. The IGNCA seeks to place the arts within the natural environment by providing a forum for creative and critical dialogue between the diverse arts, between the arts and sciences, between arts and the traditional and current knowledge systems. The IGNCA promotes interaction and understanding between diverse communities, regions, social strata, and between India and other parts of the world.

The IGNCA has been designated as a nodal agency for setting up a National Data Bank on Arts, Humanities and Cultural Heritage. It has an outstanding reference library, documented material including audio/video material, manuscripts, slides, photographs and artifacts. A major initiative is a Cultural Informatics Lab (CIL), which employs an integrated methodology to develop applications to access diverse media on all fields relating to arts through multimedia and digital technology. Broadly, the major activities of CIL can be classified under

three categories of digitization, web-enabled digital library and CRDROM/ DVDROM project.

NATIONAL RESEARCH LABORATORY FOR CONSERVATION OF CULTURAL PROPERTY

The National Research Laboratory for Conservation of Cultural Property (NRLC), which was established in 1976, is a Subordinate Office of the Department of Culture, and is recognised by the Department of Science and Technology as a scientific institution of the Government of India. The aims and objectives of the NRLC are to develop conservation of cultural property in the country. To meet its objectives, NRLC provides conservation services and technical advice in matters concerning conservation to museums, archives, archaeology departments and other similar institutions, imparts training in different aspects of conservation, carries out research in methods and materials of conservation, disseminates knowledge in conservation and provides library services to conservators of the country. The headquarters of NRLC is situated at Lucknow, and to further the cause of conservation in the southern region of the country, a regional centre of the NRLC, the Regional Conservation Laboratory is functioning at Mysore. For more information visit NRLC at http:// www.nrlccp.org.

6 Basic Economic Data

THE Ministry of Statistics and Programme Implementation consists of two wings namely : Statistics Wing and Programme Implementation Wing. The Ministry is the apex body in the official statistical system of the country. It is the authority that control the Indian Statistical Service (ISS) and Subordinate Statistical Service (SSS). It is also the Administrative Ministry for the Indian Statistical Institute, an autonomous registered scientific society of national importance. The Ministry includes, inter-alia, the Central Statistical Organisation (CSO) and the National Sample Survey Organisation (NSSO).

CENTRAL STATISTICAL ORGANISATION

The Central Statistical Organisation (CSO) located in Delhi with a wing at Kolkata, is responsible for formulation and maintenance of statistical standards, work pertaining to national accounts, industrial statistics, consumer price indices for urban non-manual employees, conduct of economic census and surveys, training in official statistics, coordination of statistical activities undertaken within the country and liaising with international agencies in statistical matters.

NATIONAL AND PER CAPITA INCOME

National Income is defined as the sum of incomes accruing to factors of production, supplied by normal residents of the country before deduction of direct taxes. It is identically equal to the net national product at Factor Cost. Table 6.1 gives National and Per Capita Income at Factor Cost at current and 1999-00 prices, while table 6.2 gives the relationship of national income and other aggregates at current prices. Table 6.3 gives the performance of the public sector and table 6.4 gives private final consumption expenditure, net domestic saving and capital formation.

CATEGORIES OF WORKERS

For the 2001 census, the population was divided into main workers, marginal workers, and non-workers. The table 6.5 shows total workers sub-divided into main workers and marginal workers and distribution of total workers in four broad categories in rural and urban areas as on 1 March 2001. Employment in the organised sector has been shown in table 6.6.

UNEMPLOYMENT

The number of persons on the live register of the employment exchanges gives an idea of the trend of unemployment subject to certain limitations. Table 6.7 gives registrations, vacancies, placements and job seekers on the 'live register' for the period 1994-2006.

NATIONAL SAMPLE SURVEY ORGANISATION

The National Sample Survey (NSS) was set up in 1950 for conducting large-scale sample surveys to meet the data needs of the country for the estimation of national income and other aggregates. It was reorganised in 1970 by bringing together all aspects of survey work under a single agency. Known as the National Sample Survey Organisation (NSSO) under the overall technical guidance of the Governing Council

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headed by a non-official and experts in the field as Members. The Director General and Chief Executive Officer of the NSSO is responsible for supervising the activities of the organisation. It has four divisions viz. (i) Survey Design and Research Division (SDRD) (ii) Field Operations Division (FOD) (iii) Data Processing Division (DPD) and (iv) Co-ordination and Publications Division (CPD).

The SDRD has its headquarters at Kolkata. The FOD has its headquarters at Delhi with a network of six Zonal Offices located at Bangalore, Guwahati, Jaipur, Kolkata, Lucknow and Nagpur, 49 Regional Offices and 116 Sub-regional Offices spread throughout the country. The DPD with its headquarters at Kolkata, functions through the Data Processing Centres located at Ahmedabad, Bangalore, Delhi, Giridih, Kolkata and Nagpur. The CPD located at Delhi functions as the Secretariat of DG & CEO, NSSO.

The subject coverage of the socio-economic surveys conform to a well-defined cycle of surveys extending over a period of 10 years. Surveys on Consumer Expenditure, Employment and Unemployment, Social Consumption (Health, Education, etc.) Manufacturing Enterprises and Service Sector Enterprises in the Unorganised Sector are covered once in five years, while subjects like Land and Livestock Holdings, Debt and Investment are covered once in 10 years. Thus, out of a cycle of 10 years, pre-assigned subjects are allocated for nine years while one year is kept for an open round to cover special topics of current interest to meet the demand of the data users. The data on Consumer Expenditure and Employment and Unemployment are also collected in every round from a thin sample along with the main subject of enquiry. The 60th round of the NSS survey (January-June 2004) was on Morbidity and Health Care besides Employment - Unemployment and Household Consumer Expenditure. All the three reports of this round have been brought out and are available to the public. The seventh quinquennial survey on Consumer Expenditure, Employment and Unemployment has been conducted during 61st Round of the NSS (July 2004 - June 2005). The Planning Commission uses Consumer Expenditure data collected through quinquennial surveys for estimating the 'Incidence of Poverty'. The 62nd round of NSS (July 2005 - June 2006) is on "Unorganised Manufacturing and usual annual survey on Household Consumer Expenditure and Employment-Unemployment. The 63rd round of NSS (July 2006 - June 2007) will be devoted to a survey on Enterprises in the service sector (excluding trade) and Household Consumer Expenditure.

The results of NSSO surveys are brought out in the form of NSS Reports which are available for sale. The NSS reports are also available on the website of the Ministry http://www.mospi.nic.in free of cost. Summary of the results of these surveys are also published in Sarvekshana, a biannual technical journal of the NSSO. Validated unit level data relating to various surveys of the NSSO are available on CD-ROM for sale at nominal price.

The NSSO undertakes the fieldwork of the Annual Survey of Industries under statutory provisions of the Collection of Statistics Act, 1953 (Central Rules, 1959) covering all factories registered under Section 2 m (i) and 2 m (ii) of the Factories Act, 1948 (2m (i): those factories employing 10 or more workers and using power and 2m (ii): those factories employing 20 or more workers and not using power, establishments registered under the Bidi and Cigar Workers (Conditions of Employment) Act, 1966 and certain activities like cold storage, water supply, gas production, motion picture production, laundry services, repair of motor vehicles

and of other consumer durables. However, the government establishments falling under the above activities are kept out of coverage.

The NSSO also provides technical guidance to states in the field of agricultural statistics for conducting crop estimation surveys and keeps a continuous watch on the quality of crop statistics through the Improvement of Crop Statistics Scheme.

The NSSO regularly collects rural retail prices on monthly basis from shops / outlets in selected markets located in a sample of 603 villages and 59 urban centres for compilation of Consumer Price Index numbers.

The NSSO conducts anUrban Frame Survey (UFS) for providing a sampling frame of first stage units in the urban sector for its surveys. It is carried out in a cycle of five years thereby providing an updated frame twice in a span of 10 years.

PRICES

WHOLESALE PRICES

The new series of index numbers of wholesale prices (base 1993-94=100) was introduced from 1 April 2000. These series have 435 distinct commodities as against 447 commodities in the old series (base 1981-82=100). The number of price quotations has also been revised from 2,371 in the earlier series to 1,918 in the new series.

Table 6.8 gives the index numbers of wholesale prices (1993-94=100) for the period 1995-96 to 2006-07 for all commodities and for selected groups / sub-groups of three major groups, namely: (i) primary articles; (ii) fuel, power, light, lubricants; and (iii) manufactured products.

CONSUMER PRICES

Table 6.9 gives consumer price index numbers for industrial workers on base 1982=100 for the period 1993-94 to 2005-06. New Series of Consumer Price Index numbers for Industrial Workers on base 2001 = 100 has been released w.e.f. January 2006 Index. Table 6.10 gives the Consumer Price Index numbers for urban non-manual employees for the period 1993-94 to 2006-07 at the all-India level and some selected centres.

FIFTH ECONOMIC CENSUS

The Central Statistical Organisation (CSO) undertook a countrywide Economic Census, for the first time in 1977 to provide a better frame for conducting follow-up surveys for collection of detailed information particularly from unorganized enterprises. Minimum basic information, viz., the distribution of non-agricultural enterprises, employment, etc., needed for preparation of a frame for conducting detailed surveys were collected in the Economic Censuses.

The second and third Economic Censuses were conducted in 1980 and 1990 along with house listing operation of 1981 and 1991 Population Censuses respectively. The fourth Economic Census was conducted during 1998 in all States / UTs in collaboration with concerned State / UT Directorates of Economics and Statistics.

The current Economic Census, the fifth in the series was conducted in the year 2005 in all the States / UTs also in collaboration with State / UT Directorates of Economics & Statistics. The Census covered all entrepreneurial activities throughout the country (except crop production and plantation).

The provisional results of Economic Census 2005 were released on 12th June, 2006. According to the provisional results there are 421.2 lakhs enterprises in the country employing 99 million persons. The provisional results are available on the Ministry's website. The detailed processing of the data is in progress and the final results are expected to be released shortly.

ANNUAL SURVEY OF INDUSTRIES

The Annual Survey of Industries (ASI) is the principal source of industrial statistics in India. It provides statistical information to objectively and realistically, assess and evaluate, the change in the growth, composition and structure of the organised manufacturing sector comprising activities related to manufacturing processes, repair services, generation, transmission, etc., of electricity, gas and water supply and cold storage. The survey is conducted annually under the statutory provisions of the Collection of Statistics Act, 1953. The ASI extends to the entire country except the States of Arunachal Pradesh, Mizoram and Sikkim and the Union Territory of Lakshadweep. It covers all factories registered under Sections 2m(i) and 2m(ii) of the Factories Act, 1948. The survey also covers bidi and cigar manufacturing establishments registered under the Bidi and cigar Workers (Conditions of Employment) Act, 1966. Certain services and activities like cold storage, water supply repair of motor vehicles and of other consumer durable like watches, etc., are also covered under the survey. Defence establishments, oil storage and distribution depots, restaurants, hotels, cafe and computer services and also the technical training institutes are excluded from the purview of survey. Units registered with Central Electricity Authority (CEA) are also not covered under the ASI. The data collected through ASI relate to capital employment and emoluments, consumption of fuel and lubricants, raw material and other input / output, value added, labour turnover, absenteeism, labour cost, construction of houses by employers for their employees and other characteristics of factories / industrial establishments. The field work is carried out by the Field Operation Division, NSSO. The CSO processes the data and publishes the results.

The ASI 2004-05 indicate a total of 1,36,363 working factories in all States and Union Territories except the States of Arunachal Pradesh, Mizoram and Sikkim and Union Territory of Lakshadweep. These factories together had a total fixed capital worth Rs. 5,12,34,554 lakh, productive capital Rs. 6,72,39,950 lakh and invested capital Rs. 7,58,69,399 lakh. These factories provided gainful employment to about 8.45 million persons and distributed Rs 64,40,594 in emoluments to employees.

ENERGY STATISTICS

The Industrial Statistics Division of CSO also brings out a publication on energy statistics containing time series data of different energy sources, viz., coal, crude petroleum, natural gas and electricity (hydro and nuclear), etc. Since the publication of ''Energy Statistics 2000-01'', data on installations made under major non-conventional energy programmes of the States and at an all-India level are also being presented in this publication. The latest publication "Energy Statistics – 2006" is the fourteenth in the series of documents brought out from time to time by the CSO to meet the information needs of national and international policy makers, administrators and researchers concerned with the energy sector. Time series data relating to production, availability, consumption and wholesale price indices of major sources of energy in India for the last 36 years (from 1970-71 to 2005-06) have been presented in the publication. The Statistics presented in this publication are based

TABLE 6.1 : NATIONAL AND PER CAPITA INCOME AT FACTOR COST

Item	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Net National Product at Factor Cost (Rs crore)							
at current prices	1585501	1696387	1847667	1993846	2246465	2501067	2846762
at 1999-2000 prices	1585501	1643998	1739876	1801430	1959599	2103350	2295243
Per Capita Net National Product (Rs)							
at current prices	15839	16648	17800	18899	20936	22946	25716
at 1999-2000 prices	15839	16133	16762	17075	18263	19297	20734
Index Number of Net National Product							
with 1999-2000 as base at current prices	100	107	117	126	142	158	180
at 1999-2000 prices	100	104	110	114	124	133	145
Index Number of per capita Net National							
Product with 1999-2000 as base at current prices	100	105	112	119	132	145	162
at 1999-2000 prices	100	102	106	108	115	122	131
Gross National Product at Factor Cost (Rs crore)							
at current prices	1771094	1902682	2080119	2248614	2531168	2833558	3225963
at 1999-2000 prices	1771094	1842228	1952241	2028928	2204746	2367711	2580761
Index number of Gross National Product							
with 1999-2000 as base at current prices	100	107	117	127	143	160	182
at 1999-2000 prices	100	104	110	115	124	134	146

TABLE 6.2 : RELATIONSHIP OF NATIONAL INCOME AND OTHER AGGREGATES
(at current prices)

(Rs crore)

S. No.	Item	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1.	National income (Net national product at factor cost)	1585501	1696387	1847667	1993846	2246465	2501067	2846762
2.	Indirect taxes less Subsidies	165510	176960	180871	192780	216073	270663	316245
3.	Net national product at market prices (1+2)	1751011	1873347	2028538	2186626	2462538	2771730	3163007
4.	Other current transfers from rest of the world (Net)	53132	58811	73363	79229	104819	91971	106830
5.	Net national disposable income (3+4)	1804143	1932158	2101901	2265855	2567357	2863701	3269837
6.	Net factor income from abroad	-15431	-22733	-20068	-16690	-18250	-22375	-24969
7.	Net domestic product at market prices (3-6 =5-6-4)	1766442	1896080	2048606	2203316	2480788	2794105	3187976
8.	Net domestic product at factor cost (7-2)	1600932	1719120	1867735	2010536	2264715	2523442	2871731
9.	Income from entrepreneurship & property to govt administrative departments*	34795	33441	33133	37036	52391	48397	49150
10.	Saving of non-departmental enterprises	20323	15740	29075	46609	58298	72177	70135
11.	Income accruing to private sector from domestic product (8-9-10)	1545814	1669939	1805527	1926891	2154026	2402868	2752446
12.	Interest on public debt	93329	114071	125521	140782	166142	171911	181196
13.	Current transfers from government administrative departments	50365	58551	69157	70767	84149	103346	130285
14.	Private income (11+12+13+4+6)	1727209	1878639	2053500	2200979	2490886	2747721	3145788
15.	Saving of private corporate sector net of retained earnings of foreign companies	42694	37485	24184	36371	54615	132203	179310
16.	Corporation tax	30692	35696	36609	46172	63267	82374	107966
17.	Personal income (14-15-16)	1653823	1805458	1992707	2118436	2373004	2533144	2858512
18.	Direct Taxes paid by households and miscellaneous receipts of Government administrative departments	39233	46845	49198	59886	81372	79764	85937
19.	Personal disposable income** (17-18)	1614590	1758613	1943509	2058550	2291632	2453380	2772575

* Includes savings of railways and communication

** Separate data on fees, fines, etc., paid by producers are not available and to that extent personal disposable income is underestimated.

TABLE 6.3 : PERFORMANCE OF PUBLIC SECTOR
(at current prices)

(Rs crore)

S. No.	Item	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1.	Gross Domestic Product	1786525	1925415	2100187	2265304	2549418	2855933	3250932
	1.1 Public	457006	481861	526326	578851	626219	686333	748528
	1.2 Private	1329519	1443554	1573861	1686453	1923199	2169600	2502404
2.	Gross Domestic Saving	484256	497218	535583	648982	820504	973028	1156809
	2.1 Public	-15494	-35061	-46578	-14057	31822	74682	71262
	2.2 Private	499750	532279	582161	663039	788682	898346	1085547
3.	Gross Domestic Capital formation unadjusted	493999	491457	529376	600723	710014	886575	1104797
	3.1 Public	144610	144639	156544	149324	174597	220487	264426
	3.2 Private	349389	346818	372832	451399	535417	666088	840371
4.	Final Consumption Expenditure	1510285	1611819	1748476	1836446	2024085	2216271	2476590
	4.1 Public	252744	265401	282123	291320	310635	342542	404511
	4.2 Private	1257541	1346418	1466353	1545126	1713450	1873729	2072079
	PERCENTAGE SHARE OF PUBLIC SECTOR							
	1. Gross Domestic Product	25.6	25.0	25.1	25.6	24.6	24.0	23.0
	2. Gross Domestic Saving	-3.2	-7.1	-8.7	-2.2	3.9	7.7	6.2
	3. Gross Domestic Capital Formation (unadjusted)	29.3	29.4	29.6	24.9	24.6	24.9	23.9
	4. Final Consumption Expenditure	16.7	16.5	16.1	15.9	15.3	15.5	16.3

TABLE 6.4 : PRIVATE CONSUMPTION, SAVING AND CAPITAL FORMATION

Year	Private final consumption expenditure in domestic market (Rs crore)		Per capita private final consumption expenditure domestic market (Rs)		Net domestic saving (Rs crore)	Rate of net saving (per cent)	Net domestic capital formation (Rs crore)		Rate of net capital formation (per cent)	
	at Current prices	at 1999-2000 prices	at Current prices	at 1999-2000 prices	at Current prices	at Current prices	at Current prices	at 1999-2000 prices	at Current prices	at 1999-2000 prices
1999-2000	1257541	1257541	12563	12563	298663	16.9	320651	320651	18.2	18.2
2000-01	1346418	1292986	13213	12689	290923	15.3	303677	290349	16.0	15.8
2001-02	1466353	1367758	14127	13177	303131	14.8	288903	262520	14.1	13.6
2002-03	1545126	1397069	14646	13242	394215	17.9	365729	326233	16.6	16.4
2003-04	1713450	1493871	15969	13922	535802	21.6	490422	414227	19.8	19.2
2004-05	1873729	1579255	17190	14489	640538	22.9	653876	520386	23.4	22.3
2005-06	2072079	1689861	18718	15265	777609	24.4	825274	628429	25.9	24.6

on the latest data supplied by the concerned government departments/ organizations, viz., Office of Coal Controller, Ministry of Petroleum and Natural Gas; Office of the Economic Adviser, Ministry of Commerce and Industry; Central Electricity Authority; and Ministry of Non-Conventional Energy Sources.

TABLE 6.5 : POPULATION BY CATEGORY OF WORKERS

(in crores)

	Rural	Urban	Total
2001 Census			
Total Population	74.25	28.61	102.86
Total Workers	31.00	9.23	40.22
Marginal Workers	8.08	0.85	8.92
Main Workers	22.92	8.38	31.30
Category of Total Workers			
(i) Cultivators	12.47	0.26	12.73
(ii) Agricultural Labourers	10.24	0.43	10.68
(iii) Household Industry Workers	1.21	0.48	1.70
(iv) Other Workers	7.07	8.05	15.12

Note : These figures exclude those of the three sub-divisions viz, Mao Maram, Paomata and Purul of Senapati districts of Manipur as Census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons

Source : Office of the Registrar General, India, New Delhi.

TABLE 6.6 : EMPLOYMENT IN ORGANISED SECTOR

(in lakhs)

	March 1994	March 1995	March 1996	March 1997	March 1998	March 1999	March 2000	March 2001	March 2002	March 2003	March 2004	March 2005
Public Sector												
Central Government	33.92	33.95	33.66	32.95	32.53	33.13	32.73	32.61	31.95	31.33	30.27	29.39
State Government	73.37	73.55	74.14	74.85	74.58	74.58	74.60	74.25	73.84	73.67	72.22	72.02
Quasi Government	65.14	65.20	64.58	65.35	64.61	63.85	63.26	61.92	60.20	59.01	58.22	57.48
Local Bodies	22.02	21.97	21.92	22.44	22.46	22.59	22.55	22.61	21.75	21.79	21.26	21.18
Private Sector (non-agriculture)												
Large establishments (employing 25 or more workers)	69.98	71.18	75.50	77.06	78.21	77.70	77.19	77.09	75.08	74.72	72.34	74.89
Smaller establishments (employing 10 to 24 workers)	9.32	9.40	9.61	9.79	9.27	9.28	9.27	9.43	9.24	9.49	10.12	9.63

Source : DGE&T, Ministry of Labour

TABLE 6.7 : REGISTRATIONS, VACANCIES NOTIFIED, PLACEMENTS AND NUMBER OF JOB-SEEKERS (LIVE REGISTER) 1994-2005 (JANUARY-DECEMBER)

Year	Number of Employment Exchanges[1]	Registrations	Vacancies notified	Placements	Live Register at the end of year	Percentage increase in Live Register over previous year
			(IN THOUSANDS)			
1994	891	5,927.3	396.4	204.9	36,691.5	1.1
1995	895	5,858.1	385.7	214.9	36,742.3	0.1
1996	914	5,872.4	423.9	233.0	37,429.6	1.9
1997	934	6,322.0	393.0	275.0	39,139.9	4.6
1998	945	5,852.0	358.8	233.3	40,089.6	2.4
1999	955	5,966.0	328.9	221.3	40,371.4	0.7
2000	958	6,041.9	284.5	177.7	41,343.6	2.4
2001	938	5,552.6	304.1	169.2	41,995.9	1.6
2002	939	5,064.0	220.3	142.6	41,171.2	-2.0
2003	945	5,462.9	256.1	154.9	41,388.7	0.5
2004	947	5,373.0	274.6	137.6	40,457.7	-2.2
2005	947	5,437.1	349.2	173.2	39,347.8	-2.7
2006	947	7,289.5	358.2	177.0	41,466.0	5.4

[1] Including University Employment Information and Guidance Bureaus.
Source : DGE&T, Ministry of Labour, New Delhi

TABLE 6.8 : INDEX NUMBERS OF WHOLESALE PRICES
(Base 1993-94 = 100)

Revised Series

Major Group/Groups & Sub-Groups		FINANCIAL YEAR AVERAGES											
	Weight	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
I. **All Commodities**	100.000	121.6	127.2	132.8	140.7	145.3	155.7	161.3	166.8	175.9	187.3	195.6	206.2
Primary Articles	22.025	125.3	135.8	139.4	156.2	158.0	162.5	168.4	174.0	181.5	188.1	193.6	208.7
(a) Food Articles	15.402	122.2	137.3	141.4	159.4	165.5	170.5	176.1	179.2	181.5	186.3	195.3	210.5
(b) Non-Food Articles	6.138	135.4	134.2	137.5	151.8	143.0	146.5	152.9	165.4	186.3	187.6	179.1	188.2
(c) Minerals	0.485	94.7	107.2	99.8	110.9	110.4	113.5	119.3	118.8	121.6	255.1	322.8	413.6
II. **Fuel Power Light & Lubricants**	14.226	114.5	126.4	143.8	148.5	162.0	208.1	226.7	239.2	254.5	280.2	306.8	323.9
III. **Manufactured Products**	63.749	121.9	124.4	128.0	133.6	137.2	141.7	144.3	148.1	156.5	166.3	171.4	179.0
(a) Food Products	11.538	117.8	124.9	134.6	149.7	151.3	145.7	145.4	153.0	166.7	174.9	176.8	182.5
(b) Beverages, Tobacco & Tobacco Products	1.339	128.1	134.9	150.5	166.7	174.1	179.8	193.8	204.3	205.6	216.2	226.8	243.5
(c) Textiles	9.800	129.4	118.7	115.5	114.4	115.0	119.9	119.3	122.2	131.6	135.7	129.5	132.3
(d) Wood & Wood Products	0.173	118.9	122.1	153.0	198.9	193.9	180.0	174.4	179.1	179.4	179.5	194.6	206.3
(e) Paper & Paper Products	2.044	131.2	131.0	126.7	130.8	149.3	165.4	172.8	174.0	173.3	174.6	178.5	190.7
(f) Leather & Leather Products	1.019	119.2	121.2	128.8	133.2	154.6	149.6	141.0	130.1	146.9	155.7	166.8	159.5
(g) Rubber & Plastic Products	2.388	123.0	124.2	124.5	123.7	123.6	125.5	126.0	132.6	135.0	134.5	139.1	148.2
(h) Chemicals & Chemical Products	11.931	126.8	131.1	137.1	145.8	155.2	164.4	169.0	173.9	177.2	181.7	188.2	193.9
(i) Non-Metallic Mineral Products	2.516	126.4	129.4	127.0	130.2	127.4	133.9	144.0	143.4	148.3	157.7	170.0	191.7
(j) Basic Metals, Alloys & Metal Products	8.342	120.3	125.9	130.7	132.8	135.0	140.3	140.7	145.1	167.8	203.3	218.4	233.3
(k) Machinery & Machine Tools	8.363	111.8	115.7	115.3	116.0	116.1	123.0	129.1	130.3	132.7	140.2	147.4	155.6
(l) Transport Equipment & Parts	4.295	115.9	123.1	127.8	131.4	135.4	143.4	146.8	147.5	147.4	154.3	159.0	162.4

Source : Office of the Economic Advisor, M/o Commerce and Industry, New Delhi

TABLE 6.9 : CONSUMER PRICE INDEX NUMBER FOR INDUSTRIAL WORKERS

(Base 1982=100)

Year	Mumbai	Ahmedabad	Kolkata	Chennai	Kanpur	Delhi	All India All Items	All India Food
Linking Factor	5.12	4.78	4.74	5.05	4.69	4.97	4.93	4.98
1993-94	279	257	264	264	262	278	258	272
1994-95	314	285	286	297	283	306	284	304
1995-96	346	309	319	336	313	331	313	337
1996-97	372	343	347	367	337	356	342	369
1997-98	412	363	369	390	360	392	366	388
1998-99	461	409	427	432	420	461	414	445
1999-2000	474	428	439	452	430	486	428	446
2000-01	512	444	456	478	430	518	444	453
2001-02	536	465	507	494	451	534	463	466
2002-03	565	480	533	519	461	556	482	477
2003-04	588	492	547	536	477	575	500	495
2004-05	610	510	568	555	494	611	520	506
2005-06*	608	522	593	567	525	652	540	526
2006-07	128	123	124	119	127	124	125	126

*Figures are average of 9 months from April-December 2005.

Note: A New series on Consumer price index numbers for Industrial workers on base 200/=100 for 2006-07was introduced.

TABLE 6.10 : CONSUMER PRICE INDEX NUMBER FOR URBAN NON-MANUAL EMPLOYEES

(Base 1984-85=100)

Year	Mumbai	Kolkata	Chennai	Delhi/New Delhi	All-India
1993-94	219	212	232	211	216
1994-95	239	229	259	229	237
1995-96	260	251	284	247	259
1996-97	285	268	311	267	283
1997-98	309	286	334	288	302
1998-99	339	316	368	338	337
1999-2000	353	328	386	359	352
2000-01	375	344	420	381	371
2001-02	395	355	456	398	390
2002-03	406	364	486	412	405
2003-04	415	382	502	425	420
2004-05	434	398	520	446	436
2005-06	450	416	543	472	456
2006-07	478	439	569	499	486

Note : A New Series of Index Numbers on Base 1984-85 = 100 was introduced from November 1987. All India Index on New Base may be converted to Old Base (1960=100) by multiplying the conversion factor 5.32. Conversion factors in respect of Mumbai, Kolkata, Chennai, Delhi/New Delhi are 5.38,4.51,5.77 and 5.08 respectively.

Source : CSO, M/o S&PI, New Delhi

MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION
(Programme Implementation Wing)

The Infrastructure and Project Monitoring Division (IPMD) in the Ministry of Statistics and Programme Implementation, monitors the performance of infrastructure sectors and Central sector projects costing Rs.20 crore and above.

INFRASTRUCTURE MONITORING

The monitoring of important infrastructure sectors in the country is designed to provide an overview of the performance of each of the sectors with a view to highlighting slippages, if any, for the benefit of the decision making authorities. This Ministry monitors the performance of the country's eleven key infrastructure sectors, viz., Power, Coal, Steel, Railways, Telecommunications, Ports, Fertilizers, Cement, Petroleum & Natural Gas, Roads, and Civil Aviation. It prepares and submits monthly Review Reports and Capsule Reports on the performance of infrastructure sectors inter-alia to the Prime Minister's office and the cabinet secretariat. The performance of these sectors is analyzed with reference to the pre-set targets for the month and cumulative period and the achievements during the corresponding month and cumulative period of the previous year. The growth rate in respect of each infrastructure sector since 2000-2001 and the production / achievement during 2006-07 is given in the table 22.1.

PROJECT MONITORING

The Project Monitoring envisages monitoring of all Central Sector projects costing Rs. 20 crore and above. In addition, it has been monitoring the progress of irrigation projects, which are being financed centrally under the Accelerated Irrigation Benefit Programme (AIBP). The Ministry, in coordination with the administrative Ministries concerned, takes up initiatives to bring about systematic improvements in various areas of project implementation. For the purpose of monitoring, the projects have been grouped into three categories viz., (i) Mega projects, each costing Rs. 1000 crore and above, (ii) Major projects, costing Rs.100 crore and above and (iii) Medium projects, costing between Rs. 20 crore and Rs. 100 crore each. While all projects are monitored on quarterly basis, projects costing Rs. 100 crore and above are monitored on a monthly basis. At the end of the 3rd quarter of 2006-07 there were 866 projects with an anticipated cost of Rs. 375,887.71 crore on the monitor of this Ministry. Statement of ongoing projects showing extent of time and cost overruns with respect to the latest schedule may be seen in Table 22.2.

TWENTY POINT PROGRAMME

The Twenty Point Programme (TPP) was conceived with the objective of improving the quality of life of the people, especially those living below the poverty line. It was meant to give a thrust to schemes relating to poverty alleviation, employment generation in rural areas; housing, education, family welfare and health, protection of environment and many other schemes having a bearing on the quality of life, especially in the rural areas. The programme, initiated in the year 1975 was restructured in 1982, 1986 and has been restructured recently in 2006. The restructured programme is known as the Twenty Point Programme (TPP) – 2006. The TPP-2006 has become operational with effect from 1st April, 2007.

TWENTY POINT PROGRAMME(TPP) – 2006

TPP-2006 consists of 20 Points and 66 items (Annexure-I) which are being monitored individually by Central Nodal Ministries concerned. Of these 66 items, 25 items

have tentatively been kept for monthly monitoring by this Ministry. The monthly information in respect of these items is being collected from various States / Union Territories and the Central Nodal Ministries.

MONITORING DESIGN FOR TPP- 2006

The monitoring mechanism for TPP-2006 has been widened by including block level monitoring in addition to the District, State and Central level monitoring. The States / UT Governments have been advised to set up Monitoring Committees at various levels in accordance with the Guidelines for TPP-2006. At the Centre, the progress of individual items is monitored and reviewed by the Departments / Ministries concerned and the Ministry of Statistics & Programme Implementation (MOSPI) monitors the Programme in totality. The Monitoring Guidelines for Twenty Point Programme-2006 have been issued and also hoisted on the Website of this Ministry.

MANAGEMENT INFORMATION SYSTEM (MIS)

The Management Information System (MIS) consists of Monthly Progress Report (MPR) for monthly monitored items based on information received from the States / UTs and the Central Ministries concerned. The Monthly Capsule Report contains highlights of MPR. The Annual Review Report consisting of all the 66 items of TPP-2006 is prepared on the basis of the information received from the Central Nodal Ministries / the State Governments / UT Administrations.

TWENTY POINT PROGRAMME (TPP) - 1986

The performance of the monthly monitored items under the Twenty Point Programme (TPP)-1986 for the last three years i.e. 2004-2005, 2005-2006 and 2006-2007 is given in the Annexure-II.

Annexure-I

TWENTY POINT PROGRAMME (TPP)-2006

List of 20 Points and 66 items

Point No.	Item No.	Name of the Points / Items
I.		**Garibi Hatao [Poverty Eradication]**
		Rural Areas
	1.	Employment generation under the National Rural Employment Guarantee Act
	2.	Swaranjayanti Gram Swarojgar Yojana
	3.	Sampoorna Grameen Rojgar Yojana
	4.	Rural Business Hubs in Partnership with Panchayats
	5.	Self help Groups
		Urban Areas
	6.	Swaranjayanti Shehari Rojgar Yojana

II. Jan Shakti (Power to People)

7. Local Self Government (Panchayati Raj and Urban Local Bodies)
   - Activity Mapping for devolution of functions
   - Budget Flow of Funds
   - Assignment of Functionaries
8. Quick and Inexpensive Justice – Gram Nyayalayas and Nyaya Panchayats.
9. District Planning Committees.

III. Kisan Mitra [Support to Farmers]

10. Water shed development and Dry land farming
11. Marketing and infrastructural support to farmers
12. Irrigation facilities (including minor and micro irrigation) for agriculture
13. Credit to farmers
14. Distribution of waste land to the landless

IV. Shramik Kalyan [Labour Welfare]

15. Social Security for Agricultural and Unorganised Labour
16. Minimum Wages Enforcement (including Farm Labour)
17. Prevention of Child Labour
18. Welfare of Women Labour

V. Khadya Suraksha [Food Security]

19. Food security:
    (i) Targeted Public Distribution system,
    (ii) Antodaya Anna Yojana,
    (iii) Establishing Grain banks in chronically food-scarcity areas

VI. Subke Liye Aawas [Housing for All]

20. Rural Housing - Indira Awaas Yojana
21. EWS/LIG Houses in Urban Areas

VII. Shudh Peya Jal [Potable Drinking Water]

22. Rural Areas.
    - Swajaldhara
    - Accelerated Rural Water Supply Programme
23. Urban Areas:
    - Accelerated Urban Water Supply Programme

VIII. Jan Jan Ka Swasthya [Health for All]

24. Control and prevention of major diseases:
    (a) HIV/AIDS (b) TB (c) Malaria (d) Leprosy (e) Blindness
25. National Rural Health Mission
26. Immunisation of Children

27. Sanitation Programme in
    - Rural Areas
    - Urban areas
28. Institutional Delivery
29. Prevention of Female Foeticide
30. Supplementary nutrition for Mothers and Children
31. Two Child norm

IX. Sabke Liye Shiksha [Education for All]

32. Sarv Shiksha Abhiyan
33. Mid Day Meal Scheme
    - Compulsory Elementary Education

X. Anusuchit Jaati, Jan Jaati, Alp-sankhyak evam Anya Pichhre Varg Kalyan [Welfare of Scheduled Castes, Scheduled Tribes, Minorities and OBCs]

34. Assistance to SC Families
35. Rehabilitation of Scavengers
36. ST Families Assistance
37. Rights of Forest dwellers – Owners of minor forest produce
38. Primitive Tribal Groups
39. No alienation of Tribal lands
40. Implementation of Panchayats (Extension to Scheduled Areas) Act [PESA]
41. Welfare of Minorities
42. Professional education among all minority communities
43. Reservation of OBCs in
    - Education
    - Employment

XI. Mahila Kalyan [Women Welfare]

44. Financial Assistance for Women Welfare
45. Improved participation of women in
    (a) Panchayats (b) Municipalities
    (c) State Legislatures (d) Parliament

XII. Bal Kalyan (Child Welfare)

46. Universalisation of ICDS Scheme
47. Functional Anganwadis

XIII. Yuva Vikas [Youth Development]

48. Sports for all in Rural and Urban areas
49. Rashtriya Sadbhavana Yojana
50. National Service Scheme

XIV. Basti Sudhar [Improvement of Slums]

51. Number of Urban poor families assisted under seven point charter viz. land tenure, housing at affordable cost, water, sanitation, health, education, and social security.

XV. Paryavaran Sanrakshan evam Van Vridhi [Environment Protection and Afforestation]

52. Afforestation
    (a) Area Covered under Plantation on - Public and Forest Lands
    (b) Number of Seedlings planted on -Public and Forest Lands
53. Prevention of pollution of Rivers and water bodies
54. Solid and liquid waste management in
    - Rural Areas
    - Urban Areas

XVI. Samajik Suraksha [Social Security]

55. Rehabilitation of handicapped and orphans.
56. Welfare of the aged

XVII. Grameen Sadak [Rural Roads]

57. Rural Roads – PMGSY

XVIII. Grameen Oorja [Energization of Rural Area]

58. Bio-diesel Production
59. Rajiv Gandhi Grameen Vidyutikaran Yojana
60. Renewable Energy
61. Energising Pump sets
62. Supply of Electricity
63. Supply of Kerosene and LPG

XIX. Pichhare Kshetra ka Vikas [Development of Backward Areas]

64. Backward Regions Grants Fund

XX. e- Shasan [IT enabled e-Governance]

65. Central and State Governments
66. Panchayats and Municipalities

MEMBER OF PARLIAMENT LOCAL AREA DEVELOPMENT SCHEME

The MPLAD Scheme was launched on 23rd December, 1993, to enable Members of Parliament to recommend works for creation of fixed community assets, based on locally felt developmental needs. The Scheme is governed by a set of Guidelines, which have been comprehensively revised and issued in November 2005.

Some of the salient features of the scheme are enumerated below:-

- Works which are developmental in nature, based on locally felt needs and always available for public use at large, are eligible under the scheme.
- The Members of Parliament have a recommendatory role under the Scheme. The MPs recommend their choice of works to the concerned District Authorities

who get them implemented by following the established procedure of the concerned State Government.

- Examining the eligibility, sanctioning, funding, selection of implementing agencies, prioritization and overall execution, monitoring of the scheme at the ground level, is done by the district authorities.
- The Lok Sabha Members can recommend works in their respective constituencies. The elected members of Rajya Sabha can recommend works anywhere in the State from which they are elected. Nominated Members of the Lok Sabha and Rajya Sabha may select works for implementation anywhere in the country.
- The funds released under the scheme are non-lapsable i.e. the liability of funds not released in a particular year is carried forward for making releases in the subsequent years subject to eligibility. The annual entitlement per MP is at present Rs. 2 crore.
- Important items of work like drinking water, education, public health, and funds for development of SC / ST are given priority.
- There is no limit for a work to be executed by Government Agencies. There is a ceiling of RS. 25 lakh for the works of Trust / Societies.
- The maximum limit for rehabilitation of work in the affected areas by severe calamities in now Rs. 50 lakh.
- In order to give special attention to development of areas inhabited by Scheduled Castes and Scheduled Tribes, 15% of MPLADS funds would be utilized for areas inhabited by SC population and 7.5% for areas inhabited by ST population.
- The role of Panchayati Raj Institutions and Urban Local Bodies as Implementing Agency is now stressed.
- Release of Rs. 1 crore in respect of MPs at the time of constitution of Lok Sabha and election to the Rajya Sabha is done automatically without waiting for monthly progress report.
- To bring in more financial accountability, Utilization Certificate for the previous financial year and the Audit certificate for the funds released in the year prior to the previous year are also pre-requisites for the release of the second instalment. Release of first instalment is made on the basis of the release of second instalment of previous year having been made.
- The normal financial and audit procedures prevalent in the states in which the works are executed apply with regard to the implementation of the works.

Impact of the Scheme

Since its inception, the Scheme has immediately benefited the local community by meeting their various developmental needs such as drinking water facility, education, electricity, health and family welfare, irrigation, non-conventional energy, community centres, public libraries, bus stands / stops, roads, pathways and bridges, etc.

Scheme Performance (as on 30.06.2007)

- Rs. 16,798.20 crore has been released, since the inception of the Scheme.

- As per the reports received from the Districts, an expenditure of Rs. 14,899.54 crore has been incurred. The percentage utilization over release is 88.70.
- Approximately 9.82 lakh works have been sanctioned and 8.85 lakh works completed, as on 30.06.2007, since the inception of the scheme. Percentage of works completed to sanctioned ones is 90.12.

Cumulative Figures (Rs. in crore)

As on	Release by GOI	Expenditure incurred	% Utilisation over release
31.03.1998	2837.80	1549.02	54.59
31.03.1999	3626.39	2315.40	63.85
31.03.2000	5017.80	3813.14	75.99
31.03.2001	7097.80	4649.49	65.51
31.03.2002	8897.80	6610.18	74.29
31.03.2003	10497.80	8272.70	78.80
31.03.2004	12179.80	10009.38	82.18
31.03.2005	13489.80	11918.49	88.35
31.03.2006	14923.70	13562.46	90.87
31.03.2007	16375.20	14579.83	89.04
30.06.2007	16798.20	14899.54	88.70

Achievements

MPLADS performance has improved due to pro-active policy initiatives and focused monitoring and review. The substantial achievement in scheme performance is from April 2004 till June, 2007.

- There has been a remarkable improvement in the utilization of funds and percentage utilization over release has risen to 88.70 from 82.18 as on 31.3.2004.
- Substantial increase in the number of works completed has been achieved. The percentage of works completed to sanctioned once has increased from 90.12 from 80.14 as on 31.3.2004.
- Data in respect of 1391 MPs (sitting and former Lok Sabha, Rajya Sabha) in 410 nodal districts have been uploaded, in the Software for monitoring MPLADS works which was launched in November, 2004 with a view to bring greater transparency and accountability.
- 207 Lok Sabha MPs and 167 Rajya Sabha MPs have given their consent for Rs. 2273.51 lakh and Rs. 3126 lakh respectively, for Tsunami rehabilitation works. An amount of Rs. 2167.81 lakh consented by Lok Sabha MPs and an amount

of Rs. 3086 lakh consented by MPs of Rajya Sabha have already been authorized for transfer to the districts of Tsunami affected areas as per priority lists submitted by the State Governments / UTs.

- An important initiative for physical monitoring of MPLADS works has also been taken up by the Ministry. The task has been assigned to NABARD Consultancy Services (NADCONS). In the first phase, 30 districts across the country have been selected for physical monitoring. This step will further strengthen transparency and accountability under the Scheme.

TABLE 22.1 : ANNUAL GROWTH RATE OF INDUSTRIAL INFRASTRUCTURE SECTORS

Growth Rate (in %age)

Sl. No	Sector	2000-01 per cent	2001-02 per cent	2002-03 per cent	2003-04 per cent	2004-05 per cent	2005-06 per cent	2006-07 per cent	Actuals 2006-07)	
1.	Power	3.9	3.1	3.2	5.0	5.2	5.1	7.3	662.52	(BU)
2.	Coal	3.6	4.2	4.4	5.6	6.1	6.4	5.9	425.11	(MT)
3.	Finished Steel	6.7	4.3	9.2	13.7	7.6	10.8	8.0	50.58	(MT)
4.	Railway Revenue Earning Freight Traffic	3.7	4.0	5.3	7.5	8.1	10.7	9.2	728.41	(MT)
5.	Cargo Handled at Major Ports	3.4	2.4	9.0	10.0	11.3	10.4	9.5	463.84	(MT)
6.	Telecommunications:									
	a) Addition in Switching Capacity	6.4	-2.6	-35.6	0.1	49.8	85.8	-23.0	96.03	(Lakh Lines)
	b) Telephone Connections	20.5	-4.7	-39.8	148.8	-17.7	123.3	-19.6	125.02	(Lakh Nos.)
	c) Cell Phone connections	-	-	119.2	115.3	10.4	89.4	85.4	522.33	(Lakh Nos.)
7.	Fertilizers	2.9	-0.5	-1.1	-1.4	8.0	1.1	3.3	16.09	(MT)
8.	Cement	-2.8	9.5	8.8	6.1	8.2	10.7	9.1	161.31	(MT)
9.	Petroleum									
	a) Crude Oil	1.5	-1.2	3.2	1.0	1.8	-5.3	5.6	33.99	(MT)
	b) Refinery	20.3	3.7	4.9	8.2	4.3	2.4	12.6	146.55	(MT)
10.	Civil Aviation									
	a) Export Cargo handled	5.1	4.1	13.3	1.0	12.4	7.3	3.6	483509	(Tonnes)
	b) Import Cargo handled	3.6	-1.0	18.6	13.4	24.2	15.8	19.4	380842	(Tonnes)
	c) Passengers handled at International Terminals	4.6	-5.0	4.8	6.5	14.0	12.8	12.1	188.84	(Lakh No.)
	d) Passengers handled at Domestic Terminals	7.7	-5.7	9.6	13.1	23.6	27.1	34.0	405.48	(Lakh No.)
11.	Roads									
	a) Upgradation of Highways	32.9	1.1	53.5	-16.6	16.1	-30.1@	-11.0@	2322 @	(Km.)

BU - Billion Units MT - Million Tonnes * Provisional

@ - Includes widening to four lanes, two lanes and strengthening of existing weak pavement by NHAI, NH(O) & BRDB.

EXTENT OF COST AND TIME OVERRUN IN PROJECTS WITH RESPECT TO LATEST SCHEDULE (AS ON 31.12.2006)

Sr. No.	Sector	Total Projects			Projects with cost overrun				Projects with time overrun				
		No. of Projects	Latest Approved Cost (Rs. Crore)	Anticipated Cost (Rs. Crore)	Cost Overrun %	No. of Projects	Latest Approved Cost (Rs. Crore)	Anticipated Cost (Rs. Crore)	% increase	Approved No. of Projects	Latest Antici. Cost (Rs. Crore)	Range Cost (Rs. Crore)	of delay (Months)
1.	Atomic Energy	5	2491.26	23360.26	-3.83	0	0.00	0.00	0.00	1	343.26	342.26	8
2.	Civil Aviation	23	1317.57	1355.05	2.84	2	96.94	134.42	38.66	12	768.87	786.28	1-21
3.	Coal	111	20378.31	20313.83	-032	2	130.35	148.67	14.05	25	1402.87	1355.73	4-144
4.	Fertilisers	1	249.00	249.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	-
5.	I & B	1	35.00	35.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	-
6.	Mines	1	4091.51	4091.51	0.00	0	0.00	0.00	0.00	0	0.00	0.00	-
7.	Steel	29	11830.61	11900.79	0.59	3	553.27	623.45	12.68	11	2008.35	2076.93	2-15
8.	Petroleum	35	39434.13	48852.85	23.88	18	32279.36	42756.00	32.46	25	34744.22	44110.80	1-48
9.	Power	64	97634.89	105480.71	8.04	14	25549.31	33501.67	31.13	27	36321.78	42452.67	1-95
10.	Health & FW	1	422.60	422.60	0.00	0	0.00	0.00	0.00	1	422.60	422.60	20
11.	Railways	284	49458.97	71210.52	43.98	156	29751.59	51797.61	74.10	32	11885.57	20819.67	9-159
12.	Road Transport & Highways	196	51307.55	51603.71	0.58	10	2200.80	2564.20	16.51	93	22750.06	22999.56	1-63
13.	Shipping & Ports	36	5827.38	5922.47	1.63	11	324.53	446.37	37.54	22	1829.92	1935.00	4-60
14.	Telecommunication	57	11615.29	10623.73	-8.54	6	361.82	463.22	26.02	36	9945.03	8972.07	5-42
15.	Urban Development	21	19380.21	19396.28	0.08	2	63.47	83.55	31.64	11	10893.23	10903.97	4-51
16.	Water Resources	1	542.90	1069.40	996.98	1	542.90	1069.40	96.98	1	542.90	1069.40	3
	Total	**866**	**337817.18**	**375887.71**	**11.27**	**225**	**91854.34**	**133588.56**	**45.44**	**297**	**133858.66**	**158247.94**	

7 Commerce

FOREIGN trade has played a crucial role in India's economy growing at almost three times the growth of GDP during the last four years. India's exports cover a wide range of items including engineering goods, ores and minerals, chemicals and related products, gems and jewelery and of late, petroleum products. Imports have increased substantially, bulk of which comprise items like petroleum and crude products, fertilizers, precious and semi-precious stones for export production, and capital goods, raw materials, consumables and intermediates for industrial production and technological upgradation.

TABLE 7.1 : INDIA'S FOREIGN TRADE

(Rs crore)

Year	Exports	Imports	Total trade	Trade deficit
1990-91	32558	43193	75751	-10635
1991-92	44042	47851	91893	-3809
1992-93	53688	63375	117063	-9687
1993-94	69751	73101	142852	-3350
1994-95	82674	89971	172645	-7297
1995-96	106353	122678	229031	-16325
1996-97	118817	138920	257737	-20103
1997-98	130101	154176	284277	-24075
1998-99	139753	178332	318085	-38579
1999-2000	159561	215236	374797	-55675
2000-01	203571	230873	434444	-27302
2001-02	209018	245200	454218	-36182
2002-03	255137	297206	552343	-42069
2003-04	293367	359108	652475	-65741
2004-05	375340	501065	876405	-125725
2005-06	456483	635013	1091496	-178530
2006-07(P)	563800	820568	1384368	-256768

(P) Provisional data.

TRADE SCENARIO

India's total external trade (exports plus imports including re-exports) in the year 1950-51 stood at Rs. 1214 crores. Since then, this has witnessed continuous increase with occasional downturns. During 2006-07 the value of India's external trade reached Rs. 1384368 crore. A statement indicating India's total export, import, total value of

foreign trade and balance of trade from the year 1990-91 to 2006-07(P), in rupee terms, is given in table 7.1 (see above).

India's exports of merchandise goods touched the target of US$125 billion in 2006-07 recording a growth of around 21% in dollar terms. In Rupee terms, the exports of merchandise goods during 2006-07 was valued at Rs. 563800 compared to Rs. 456483 crore in 2005-06 with a growth rate of 24%. India's growth of exports is much higher than that of the world economy as well as the many major economies of the world.

At the same time, imports increased from Rs. 635013 crore in 2005-2006 to Rs. 820568 crore during 2006-2007 thereby registering a growth of 29% in rupee terms. The trade deficit in 2006-07 was Rs. (-)256768 crore as against Rs. (-) 178530 crores during 2005-06.

India has trading relations with all the major trading blocks and all the geographical regions of the world. Region-wise and sub region-wise spread of India's trade during 2005-06 and 2006-07 is given in table 7.2. In dollar terms, Asia & Asean accounted for 48.46 per cent of India's total exports, followed by West Europe (24.06%) and America (20.61%) during 2005-06. India's imports were highest from Asia & Asean (35.22%) followed by West Europe (21.17%) and America (7.78%), during the same period.

TABLE 7.2 : DIRECTION OF INDIA'S TRADE

(Rs crore)

Region	Exports April-March		Imports April-March	
	2005-06	2006-07*	2005-06	2006-07
1. **Europe**	109429	105577	133464	137684
1.1 EU countries 25)	101600	97730	101127	98770
1.2 **Other WE countries**	7146	6874	30960	37611
1.2 **East Europe**	682	973	1377	1303
II **Africa**	24723	29975	17156	44035
III. **America**	93719	89512	490665	65816
IV. **Asia and Asean**	220377	229763	222055	409918
V. **CIS & Baltics**	5480	5429	12780	13513
VI. **Unspecified Region**	1072	2948	630526	674443

*April-January figures

EXPORTS

Exports in rupee terms have shown an increasing trend and diversification of its base over the years. While there are year-to-year variations, the commodities whose exports have been increasing over the last few years and also in 2006-07 include agriculture & allied products, ores and minerals, gems and jewellery, chemical and allied products, engineering goods and petroleum products. Exports of principal commodities during 2006-07 as compared to the corresponding period of previous year are given in table 7.3

TABLE 7.3 : EXPORT OF PRINCIPAL COMMODITIES

(Rs crore)

Commodities	2005-06 (April-March)	2005-06 (April-Jan)	2006-07 (April-Jan)	% change 2006=07 (April-Jan.) 2005-06 (April-Jan)
I. PLANTATIONS	3209	2679	3301	+23
II. AGRI & ALLIED PRODUCTS	32797	25161	30436	+21
III. MARINE PRODUCTS	6356	5906	6034	+2
IV. ORES & MINERALS	27401	20951	24381	+16
V. LEATHER & MFRS.	11626	9746	10921	+12
VI. GEMS & JEWELLERY	68830	55720	58442	+5
VII. SPORTS GOODS	586	484	490	+1
VIII. CHEMICALS &	68686	55005	64920	+18
RELATED PRODS.				
IX. ENGINEERING GOODS	84867	67407	95981	+42
X. ELECTRONIC GOODS	9934	8007	10515	+31
XI. PROJECT GOODS	595	580	241	-58
XII. TEXTILES	67322	55076	60124	+9
XIII. HANDICRAFTS	1817	1705	1390	-18
XIV. CARPETS	3670	3072	3373	+10
XV. COTTON RAW, incl. waste	2792	1765	3881	+120
XVI. PETROLEUM PRODUCTS	50979	41822	69726	+67
XVII. UNCLASSIFIED EXPORTS	13332	9492	19050	+101

IMPORTS

Imports are made to meet the essential requirements of domestic consumption, investment, production and as inputs for exports. Bulk imports as a group registered a growth of 42.56% in rupee terms during April-January 2006-07 and accounted for 46.56 per cent of the total imports. This group includes fertilizers, cereals, edible oils, newsprint and petroleum products. The other principal imports consist of pearls, gold and silver, machinery, medicinal and pharmaceutical products, organic and inorganic chemicals, coal, artificial resins etc. The details of Indian imports of principal commodities during 2005-06 and 2006-07 are given in table 7.4.

TABLE 7.4 : IMPORT OF PRINCIPAL COMMODITIES

(Rs crore)

Commodities	2005-06 (April-March)	2005-06 (April-Jan)	2006-07 (April-Jan)	% change 2006=07 (April-Jan.) 2005-06 (April-Jan)
A. BULK IMPORTS	268342	220256	313996	+43
Cereals & preparations	154	117	1544	+1219
Fertilizers	9159	8238	12758	+55
Edible Oil	8716	7199	8176	+13
Pulp & waste paper	2471	2109	2339	+11
Paper board & mfrs.	4347	3551	4625	+30
Newsprint	1915	1561	2091	+34
Non-ferrous Metals	8157	6720	9742	+45
Metalliferrous ores & products	16693	13830	30993	+124
Iron & Steel	19621	17009	22948	+35
Petroleum crude & products	194640	157726	216530	+37
B. PEARLS, PRECIOUS & SEMI-PRECIOUS STONES	40469	35523	27135	-24
C. MACHINERY	68948	56550	80040	+41
D. PROJECT GOODS	3612	2931	6923	+136
E. OTHERS of which:	249154	206290	246349	+19
Pulses	2347	2192	2980	+36
Coal, coke & briquettes	16380	14143	16631	+17
Non-metallic mnl. mfrs.	2761	2295	2932	+28
Organic & Inorganic chmls.	30501	25589	29308	+14
Dyeing, tanning matrl.	2203	1869	2241	+20
Medicinal & Pharma prds.	4515	3807	4677	+23
Artf. resins, etc.	9895	8400	9608	+14
Chemical products	4600	3820	5029	+32
Other Textile yarn, fabrics, etc	3641	3102	3446	+11
Manufactures of metals	5316	4454	5796	+30
Profl. instruments, etc.	8747	7148	8568	+20
Electronic goods	58406	47444	59594	+26
Wood and wood products	3994	3444	3710	+8
Gold & Silver	50098	40658	56140	+38

EXPORT PROMOTION MEASURES

Export promotion being a constant endeavour of the Government, export performance is constantly monitored and export strategy and export policies are formulated.

In the Foreign Trade Policy for the years 2004-09 announced on August 31st 2004, the Government spelt out a bold vision to double India's percentage share of

Graph

global merchandise trade within five years and to focus on the generation of additional employment. Stability of trade policy regime has yielded positive results and in the three years since the inception of the Foreign Trade Policy (FTP), India's merchandise exports have recorded appreciable growth. According to the latest information published in the World Trade Statistics by the World Trade Organisation (WTO), India's share in total world trade (which includes trade in both merchandise and services sector) has gone up from 1.1% in 2004 – i.e. the initial year of the Foreign Trade Policy (2004-09) to 1.5% in 2006.

Based on the current rates of growth of merchandise and services trade, it is expected that India's share in world trade covering merchandise plus service sector trade may well double from the level of 2004 to reach 2% mark in 2009.

In line with the government objective of having all-inclusive growth, the Annual Supplement to Foreign Trade Policy (FTP) announced in April, 2007 also focused on promoting employment-intensive export growth through initiatives like Focus Products, Focus Market Schemes, the Vishesh Krishi Upaj Yojana as well as sector-specific initiative giving thrust on handloom, handicrafts, cottage and tiny industries, gems and jewellery etc. Under the general export promotion schemes, the DEPB (Duty Entitlement Pass Book) scheme has been extended for another year up to 31.3.2008. These measures are aimed to augment and sustain the current rate of export growth in line with India's comparative advantage and the emerging situation in the international market. The export target for 2007-08 has been fixed at US$ 160 billion.

MULTILATERAL TRADE ISSUES AND INITIATIVES

WTO and India

The World Trade Organization (WTO) came into being as a result of the evolution of the multilateral trading system starting from the establishment of the General Agreement on Tariffs and Trade (GATT) in 1947. The protracted Uruguay Round negotiations spanning the period 1986-1994, which resulted in the establishment of the WTO, substantially extended the reach of multilateral rules and disciplines related to trade in goods, and introduced multiateral rules applicable to trade in agriculture (Agreement on Agriculture), trade in services (General Agreement on Trade in Services - GATS) as well as trade-related intellectual property rights (TRIPS). A separate understanding on WTO dispute settlement mechanism (DSU) and trade policy review mechanism (TPRM) were also agreed upon.

India is a founder Member of both GATT and the WTO. The WTO provides a rule-based, transparent, and predictable multilateral trading system. The WTO rules envisage non-discrimination in the form of National Treatment and Most Favoured Nation (MFN) treatment to India's exports in the markets of other WTO members. National Treatment ensures that India's products once imported into the territory of other WTO Members would not be discriminated vis-a-vis the domestic products in those countries. MFN treatment principle ensures that Members do not discriminate among various WTO Members. If a Member country believes that the due benefits are not accruing to it because of trade measures by another WTO Member, which are violative of WTO rules and disciplines, it may file a dispute under the Dispute Settlement Mechanism (DSM) of the WTO. There are also contingency provisions built into WTO rules, enabling Member countries to take care of exigencies like balance of payment problems and situations like a surge in imports. In case of unfair trade practices causing injury to the domestic producers, there are provisions to impose

Anti-Dumping or Countervailing duties as provided for in the Anti-Dumping Agreement and the Subsidies and Countervailing Measures Agreement.

WTO Membership

The present strength of WTO Membership is 151. This includes China and Nepal whose accession was approved by the WTO Ministerial Conferences held in Doha and Cancun in November 2001 and September 2003 respectively. Saudi Arabia became the 149th member of the WTO at the Hong Kong Ministerial Conference in December 2005. Vietnam became the 150th member of the WTO after it completed all ratification formalities on 11th January 2007 in accordance with the WTO General Council Decision of 7 November 2006 approving its membership. The Kingdom of Tonga, whose accession was approved by the WTO Ministerial Conference held in December 2005, completed its domestic ratification procedure, and has become the 151st member of the WTO on 27th July 2007. There are presently around 30 countries in the process of accession to the WTO.

WTO Ministerial Conference

The highest decision-making body of the WTO is the Ministerial Conference, which has to meet at least once every two years. It brings together all members of the WTO, all of which are countries or separate customs territories. The Ministerial Conference can take decisions on all matters under any of the multilateral trade agreements. Since the coming into being of the WTO in January 1995, six Ministerial Conferences have been held, namely, Singapore (9-13 December 1996); Geneva (18-20 May 1998); Seattle (30 November - 3 December 1999); Doha (9-14 November 2001); Cancun (10-14 September 2003); and Hong Kong, China (13-18 December 2005).

The Singapore Ministerial Conference saw the interested Members of the WTO negotiating an Information Technology Agreement and the launch of a work programme on the four so-called Singapore Issues, namely, Relationship between Trade and Investment; Interaction between Trade and Competition Policy; Transparency in Government Procurement; and Trade Facilitation. The Geneva Ministerial Conference was timed to coincide with the celebrations of the 50 years of the GATT multiateral trading system. The Seattle Ministerial Conference collapsed without being able to reach a consensus on the Declaration to be adopted by the Ministers.

A new round of trade negotiations launched at Doha (November 2001)

The Doha Ministerial Conference adopted a comprehensive Work Programme, also called the Doha Development Agenda (DDA), launching negotiations on some issues and setting out additional parameters and time frames for the negotiations on agriculture and services that had commenced on 1 January 2000 in accordance with the built-in mandates in the respective WTO Agreements. The Doha Ministerial Declaration mandated the negotiations to conclude by the end of 2005. The Doha Ministerial Conference also adopted a Declaration on the TRIPS Agreement and Public Health and a Decision on Implementation-related Issues and Concerns.

Cancun Ministerial Conference (September, 2003)

In the negotiations till the Cancun Ministerial Conference, all timelines were missed, including on issues of importance to developing countries, such as the one on TRIPS and Public Health; Implementation issues; and Special & Differential Treatment (S&DT). Even the implementation of paragraph 6 of the Doha Ministerial Declaration on TRIPS and Public Health, an issue very critical to the African and other developing

countries for addressing their public health concerns, took a long time and the decision was taken only on 30 August 2003, after protracted negotiations.

The Cancun Ministerial Conference was to take stock of the progress in DDA negotiations, take necessary decisions and to provide further political guidance. However, just prior to the Cancun Ministerial, the US and the EC made a joint submission on the framework for modalities of negotiations on Agriculture that was based on their own perceptions and did not take into account the concerns of developing countries. This led to the formation of a coalition of developing countries, now called the G-20, which has since played a very major role in shaping the negotiations on agriculture.

The Cancun Ministerial Conference became complex in view of the serious differences in the ambition levels of the WTO Members on the two most contentious issues, namely, Agriculture (and the cotton initiative of some West African developing countries) and the so-called Singapore issues. The Conference did not produce any positive result, and instead adopted a short Ministerial Statement on 14 September, 2003, recognizing that more work needed to be done in some key areas to enable the Members to proceed towards the conclusion of the negotiations in fulfilment of commitments taken at Doha. The Ministers instructed the officials to continue working on outstanding issues with a renewed sense of urgency and purpose and taking fully into account all the views expressed in the Cancun Ministerial Conference. Further, the Ministers asked the Chairman of the General Council, working in close co-operation with the Director General of the WTO, to co-ordinate this work and to convene a meeting of the General Council at Senior Officials level no later than 15 December 2003 to take the action necessary at that stage to enable the WTO to move towards a successful and timely conclusion of the negotiations.

July 2004 Framework Decision

Even though the Cancun Ministerial Conference failed, the WTO Members continued consultations under the General Council process in Geneva. As directed by the Ministers at Cancun, the General Council met on 15-16 December 2003 and started efforts for reaching a consensus on various issues. India and other members strongly supported the General Council Chairman in his efforts to revive the process. The G-20 played a crucial role in the aftermath of the Cancun Ministerial Conference in the negotiations on agriculture. The agreement concerning negotiations on agriculture imparted momentum to the other areas in the Work Programme resulting in the Decision of the WTO General Council of 1 August 2004 (commonly called the July Framework), setting out the guidelines for further negotiations until the Sixth Ministerial Conference under the Doha Work Programme, encompassing key areas of Agriculture, Non-Agricultural Market Access and Services. It also decided to drop the three Singapore issues of Trade and Investment, Trade and Competition Policy and Transparency in Government Procurement and launch negotiations on the fourth remaining Singapore issue, namely, Trade Facilitation (TF).

Hong Kong Ministerial Conference (December 2005)

The negotiations launched at the Doha Ministerial Conference in 2001 received fresh momentum with a positive outcome at the Sixth WTO Ministerial Conference at Hong Kong, held from 13-18 December 2005. The Hong Kong Ministerial Declaration called for the conclusion of negotiations launched at Doha in 2006 and established time-frames and targets in specific areas. Among other issues, WTO Members agreed that the modalities in Agriculture and Non-Agricultural Market Access (NAMA) be

established by 30 April 2006 and comprehensive draft schedules based on these modalities submitted no later than July 31, 2006. In Services, a second round of revised offers was agreed to be tabled by 31 July 2006 and the final draft schedules to be submitted by 31 October 2006.

India has engaged in these negotiations to ensure that its core concerns and interests continue to be adequately addressed as negotiations proceed from one stage to the next. The Minister of Commerce and Industry participated in a number of Mini-Ministerial Meetings as well as meetings of G-20, G-33, FIPS (Five interested Parties), organized in 2005 to move the negotiations forward. India's approach to the negotiations has always been dictated by our national interests, especially our concerns for the millions of farmers who are dependent for their livelihood on agriculture, as also our objective of stimulating economic growth and development through trade. Under the overall guidance of the Cabinet Committee on WTO Matters, negotiating objectives, and the strategies to achieve them, have been developed based on analytical work and an intensive process of dialogue with relevant stakeholders, including Indian industry and representatives of trade unions and farmers' associations and UT/State governments and through regular inter-Ministerial meetings at the Central Government level. This process has also included consultations by the Minister of Commerce and Industry with different political parties, including those held within the Parliamentary Standing and Consultative Committees attached to the Ministry of Commerce and Industry. Relevant Ministries have also been participating in the negotiating processes in the WTO across key areas. A full day workshop with Chief Secretaries/Officials of all States/UT Governments was held in Delhi on 24 May 2005 to apprise them of the state of play of negotiations at the WTO, to set out key negotiating issues and obtain their inputs. The Agriculture and Commerce & Industry Ministers also held discussions on 8 December 2005 with Farmers Associations.

At Hong Kong, India was proactive in articulating its position on issues of concern to it and other developing countries and played a key role in further strengthening the developing country coalitions by bringing together G-20, G-33 and G-90- groups of countries in a broad alliance to reinforce each other's positions on issues of mutual interest. The Hong Kong Ministerial Declaration, as finally agreed upon, has addressed India's core concerns and interests, with sufficient negotiating space for future work leading to modalities for negotiations in the coming months. The key outcomes of the Ministerial Conference and the timelines approved in the Hong Kong Ministerial Declaration are indicated below.

KEY OUTCOMES AND TIMELINES OF THE HONG KONG MINISTERIAL DECLARATION OF THE WTO

- Amendment to the TRIPS Agreement reaffirmed to address public health concerns of developing countries.
- Duty-Free, Quota-Free market access for all LDCs' products by all developed countries. Developing country declaring itself in a position to do so to also provide such access; however flexibility provided in coverage and to phase in their commitments.
- Resolved to complete the Doha Work Programme fully and to conclude negotiations in 2006.
- In Cotton, export subsidies to be eliminated by developed countries in 2006;

trade distorting domestic subsidies to be reduced more ambitiously and over a shorter period of time.

- To establish modalities in Agriculture and non-agricultural market access (NAMA) by 30 April 2006; Draft Schedules by 31 July 2006.
  - In agriculture, to eliminate export subsidies by 2013, with a substantial part in the first half of the implementation period.
  - On their trade distorting domestic support, the three heaviest subsidizers to attract the steepest cuts; developing countries like India with no AMS will be exempt from any cuts on de minimis and on overall levels.
  - Developing countries to have the flexibility to self-designate Special products (SPs); price and quantity triggers agreed on the Special Safeguard Mechanism (SSM).
  - In NAMA, S&DT elements, such as on flexibility and less than full reciprocity in reduction commitments for developing countries reaffirmed.
  - No sub-categorization of developing countries when addressing concerns of small, vulnerable economies.
- To advance the development objectives, balance in ambition in market access between Agriculture and NAMA required.
- In Services, to submit requests by 28 February 2006; a second round of revised offers by 31 July 2006; Final Draft Schedules by 31 October 2006.
- To intensify consultation on implementation issues; progress to be reviewed and appropriate action taken by 31 July 2006, including on the TRIPS Agreement and CBD.
- To report with clear recommendations for a decision by December 2006 on S&DT.
- Clear political guidance given on Services, Rules, Trade and Environment, TRIPS, Trade Facilitation, for concluding negotiations in 2006; rapid conclusion of DSU negotiations.

The **current state of play** of negotiations under various areas covered by the Doha Work Programme is as under:

At Hong Kong, WTO Ministers had agreed to establish modalities for agriculture and Non-Agricultural Market Access (NAMA) by 30 April 2006 and submit the draft Schedules by 31 July 2006, and to conclude the negotiations across all areas of the Doha Round by end year 2006. However, despite intensive negotiations, these deadlines could not be met.

The intensive discussions through January to July 2006 had focused mainly on the triangular issues of Domestic Support, Agricultural Market Access (AMA), and NAMA. During the last Ministerial meeting of the G-6 (Australia, Brazil, EU, Japan, India, and the US) held in July 2006, although there were some indications of flexibilities in the positions held by all participants, the US maintained that this movement was inadequate. The US thus did not reveal any flexibility either to improve its offer under negotiations on **Agriculture** to cut its own domestic support or to lower its ambition on market access openings in other countries. In light of the impasse particularly in agriculture, and ruling out the possibility of finishing the Round by the end of 2006, the negotiations across the Round as a whole were suspended on 27 July 2006 by the

Director General, WTO, to enable serious reflection by participants, with a view to resuming them when the negotiating environment is right.

Since then quiet diplomacy through informal contacts, at Ministerial and officials levels at the margins of events, such as ASEAN, continued. The G-20 High Level Ministerial Meeting held on 9-10 September 2006 at Rio de Janerio marked the first specific meeting on WTO negotiations. The G-20 issued a joint statement with country-co-ordinators of other developing country groupings (G-33, ACP countries, African Group, LDCs, Small Vulnerable Economies (SVEs), and the Cotton-4 placing the responsibility for successfully concluding the negotiations on the developed countries (the US and the EU). While calling upon them to improve substantially their own domestic support and market access offers, the developing countries reiterated the development dimension of the Doha Round.

The mandate for **Non Agricultural Market Access** (NAMA) under the Hong Kong Ministerial Declaration seeks to achieve the objective of reduction or elimination of tariffs, including tariff peaks, high tariffs and tariff escalation, in particular on the products of export interest for the developing countries through the use of a Swiss formula. The coefficients for the Swiss formula would ensure less than full reciprocity (LTFR) in reduction commitments for developing countries. On unbound tariff lines, the base rate for commencing formula reductions would be computed on the basis of a non-linear mark-up on the 2001 applied rates. Flexibilities under paragraph 8 of the July, 2004 Framework Agreement are intended to protect sensitive lines of developing countries from the purview of formula reductions or bindings. Sectorial Initiatives look at elimination or harmonisation at low levels customs tariffs in specific sectors which would purely be on a voluntary basis. Proposals have been made in sectors such as automobiles, bicycles, chemicals, hand tools, electrical & electronics, forestry, health care, marine products, gems & jewellery, raw materials, sports goods, textiles & clothing, toys etc. Non-tariff barriers (NTBs) is yet another element of the NAMA negotiations where the focus has shifted from the notification of NTBs to seeking specific negotiating proposals from members. Some proposals cutting across sectors (known as horizontal proposals) relating to export duties, export taxes and remanufactured goods were made. On the other hand, vertical proposals pertaining to specific sectors have been made on labelling in textiles, apparel, footwear and travel goods; harmonisation of standards in electronics; and wood products. India as part of its NAMA 11 coalition of developing countries had proposed the resolution of NTBs through a Facilitative Mechanism which is intended to expedite resolution of disputes on NTBs through a fast track, informal, efficient and less adversial mechanism than the current dispute settlement mechanism in the WTO. This proposal has enormous support with co-sponsorship from the African Group, European Communities, LDCs, Norway and Switzerland.

A group of 10 developing countries, including India, formed a coalition known as the NAMA-11, which is negotiating on substantive issues of concern for developing countries. The coalition group has been instrumental in highlighting the special needs and interests of developing countries which include taking on less than reciprocal reduction commitments and use of flexibilities to have a special dispensation for sensitive tariff lines.

Services' Sector in India accounted for 54.1% of GDP in 2005-2006. In the year 2006, India's service exports grew to US $ 73 billion and its imports were $70 billion. India's share in world trade of export of services was 2.7% during the year 2006.

During the current round of negotiations under the General Agreement on Trade in Services (GATS), India has offered to liberalize in a number of service sectors in its 'Revised Offer' tabled at the WTO in August 2005.

The Revised Offer is a substantial improvement over India's Initial Offer (January 2004). New areas covered in the 'Revised Offer' include architectural, integrated engineering and urban planning and landscape services; veterinary services; environmental services; distribution services; educational services; recreational, cultural and sporting services, and maintenance and repair of aircraft. Further, coverage and commitments improved in construction and related engineering services; tourism services; financial Services etc. New commitments have also been offered in cross border supply in a large range of other business services; professional services; research and development services; rental and leasing services; real-estate services; etc.

India's seeks, in the Services negotiations at the WTO, market access in Cross Border Supply of Services (Mode 1) and Movement of Natural Persons (Mode 4). India's Mode 4 objectives are driven by the competence of its service professionals and Mode 1 objectives are driven by the strong competitive edge of India in Information Technology (IT) and ITES services. In Mode 1, India wants binding commitments by WTO member nations so as to ensure predictable and certain policy regime. In Mode 4, India has been pushing for issues such as removal of the Economic Needs test, clear prescription of the duration of stay, provisions of renewal and extension of visas, etc. India wants market access under Mode 4 for two categories of service suppliers, i.e. Contractual Services Suppliers (CSS) and Independent Professionals (IP).

At the Hong Kong Ministerial, it was agreed that the dynamics of negotiations would have to include plurilateral requests while retaining the primacy of the request-offer process so as to raise the ambition levels of the services' negotiations, while keeping the GATS architecture intact. Concerns of developing countries have been addressed adequately in the Hong Kong Ministerial declaration. Developing countries with the leadership of India, have managed to secure guidance for getting the current levels of market access bound in Mode-1 and also a direction to discuss modalities of doing away with Economic Needs Tests.

The Ministerial declaration also provides a direction for developing disciplines in domestic regulations which is of crucial interest to India especially disciplining qualification and licensing requirements and procedures, without which in Mode 4 India may not be able to have 'real' market access. Negotiations on Domestic Regulations are under way at the WTO. Efforts are being made to put in place such disciplines before the end of the current round as per the Hong Kong mandate. India has argued to strike a balance between the right to regulate and regulations becoming unnecessary barriers to trade.

In pursuance of the Hong Kong Ministerial directives, plurilateral discussions under GATS were initiated at the WTO in Geneva. 22 plurilateral groups have been formed. India has received plurilateral requests in 14 different services sectors, including Telecom, Finance, Maritime, Environment, Education, Air transport, Energy, Audio Visual and Retail. India is the co-ordinator of the plurilateral requests on Mode 1 (cross border supply) and Mode 4 (Movement of Natural Persons) - the core areas of interest of India at the services negotiations - and is also co-sponsor of plurilateral requests on Computer and Related Services (CRS) and Architectural, Engineering and Integrated Engineering Services.

At present, the Negotiating Groups across all areas including services negotiations of the Doha Round have fully resumed since February 2007. In order to take the services negotiation forward, fresh round of revised Offers would need to be tabled at the WTO by Member countries. India would submit its second revised Offer based on the timelines, which would be decided depending on the outcome of negotiations in Agriculture and Non Agricultural Market Access (NAMA).

The General Council adopted on 14th December, 2006 a Decision on the transparency Mechanism for Regional trade Agreements. The Mechanism has provisions of early announcement, notification and subsequent notification of amendments to the **RTA.** Enhanced transparency of the RTA is sought to be achieved through a factual presentation of the RTA by the WTO Secretariat, a single formal meeting on the RTA, replies to questions posed by Members and any additional exchange of information in written form.

In a similar decision on 14th December, 2006, the General Council also invited the Council for Trade and development (CTD) to consider a transparency mechanism for Preferential Trade Arrangements coming within the purview of Article 2 of the Enabling Clause.

Trade Facilitation is the only subject from the bundle of four Singapore issues on which negotiation had started pursuant to the WTO's July Framework Agreement of 2004. The modalities for negotiation are set out in Annex D of the July framework Agreement. There are three identified aims of negotiation under Annex D: (i) To clarify and improve relevant aspects of GATT Articles V (Freedom of Transit), VIII (Fees and Formalities connected with Importation and Exportation) and X (Publication and Administration of Trade Regulations); (ii) Enhance technical assistance and support for capacity building in this area; and (iii) To have provision for effective co-operation between Customs authorities on trade facilitation and Customs compliance issues.

India's participation in the negotiations has been positive and constructive. In the ongoing negotiation, Members have already submitted a large number of proposals for clarification of GATT Articles V, VIII & X. India has filed a detailed proposal on how a multiateral co-operation mechanism would operate (W / 68) which has been co-sponsored by Sri Lanka. Pursuant to the proposal submitted by India under document W / 68 on Co-operation Mechanism for Customs Compliance, another paper (TN / TF / W / 103 dated 10 May, 2006) has been filed by India containing specific elements for multiateral co-operation mechanism for exchange of information between customs administrations of Members. Later India has filed its textual proposal (TN / TF / W / 123 dated 4 July, 2006) on Cooperation Mechanism for Systems Compliance which has also been co-sponsored by Sri Lanka.

India has also presented its own proposals for clarification of the existing provisions of GATT Article VIII and Article X vide two papers TN / TF / W / 77 dated 10th February, 2006 and TN / TF / W / 78 dated 13th February, 2006. India has subsequently filed textual proposals vide TN / TF / W / 121 and TN / TF / W / 122, both dated 4th July, 2006.

Negotiations are also looking at the aspect of technical and financial assistance for capacity building in developing countries. A proposal (TN / TF / W / 82 dated 31 March, 2006) has been jointly filed by People's Republic of China, India, Pakistan and Sri Lanka. This paper addresses the concerns of the developing countries such as (i) the arrangement of commitments for developing Members, (ii) the provision of

technical assistance and capacity building support; and (iii) the applicability of the dispute settlement mechanism.

The Hong Kong Ministerial Declaration on Trade Facilitation is a good basis for further negotiations on this subject.

The WTO Negotiating Group on rules has been considering proposals from various WTO members to clarify and improve the existing disciplines of the **Anti-Dumping Agreement and Agreement on Subsidies and Countervailing Measures (ASCM),** including fisheries subsidies. In the area of anti-dumping, the Negotiating. Group on rules has analyzed in detail proposals on such issues as determination of injury / causation, the lesser duty rule, public interest, prohibition of practice of zeroing, transparency and due process, interim and sunset reviews, duty assessment, circumvention, the use of facts available, limited examination and all others rates, dispute settlement, the definition of dumped imports, affiliation, standing requirements, definition of domestic industry etc. In respect of subsidies and countervailing measures, the Group is considering various proposals for amendments to the ASCM. The proposals generally seek to strengthen disciplines in these two agreements. There is also a proposal to expand the categories of subsidies to be prohibited under Article 3 of the ASCM. India has made a number of submissions, including a textual proposal submitted in early 2005 on the mandatory application of Lesser Duty Rule. India is also participating actively in the negotiations on fisheries subsidies and working closely with other members, including to seek effective S&DT in any new disciplines.

The Hong Kong Ministerial Conference directed the Group to intensify and accelerate the negotiating process in all areas of its mandate, on the basis of detailed textual proposals before the Group or yet-to-be submitted proposals and complete the process of analyzing proposals by the Members on AD and SCM Agreements as soon as possible, and mandated the Chairman to prepare, early enough to assure a timely outcome within the context of the 2006, an end date for the Doha Development Agenda, consolidated texts of the AD and SCM Agreements that shall be the basis for the final stage of the negotiations. The Chairman will be submitting his text only after the negotiations resume, taking into account progress in other areas of the negotiations.

The deadlines for the establishment of modalities in Agriculture and Non-Agricultural Market Assess (NAMA) by 30 April 2006; and submission of Draft Schedules by 31 July 2006 have been missed. Hectic negotiations were held and efforts were first made to establish the modalities by 30 June 2006. An informal meeting of 31 Trade Ministers, including from India, was convened by the Director General, WTO, Mr. Pascal Lamy, in Geneva between 29 June and 1 July 2006 but without any success. A meeting of the trade negotiations Committee of the WTO was also held on 1 July 2006 wherein the DG was requested to conduct intensive and wide ranging consultations with a view to facilitating the establishment of modalities in Agriculture and NAMA. These consultations were to be based on the draft texts prepared by the Chairs of the respective negotiating groups. The DG was requested to report back to the TNC as soon as possible.

Efforts were then made to establish the modalities by 31 July 2006. A meeting of the G-6 WTO Ministers (from Australia, Brazil, European Union, India, Japan and the United States) was held in Geneva on 23-24 July 2006 and there was no convergence on the core issues of substantial reduction of trade-distorting support and other development issues. Following detailed consultations, the DG, WTO convened an

informal meeting of the WTO Trade Negotiations Committee (TNC) on 24 July 2006. The DG reported that the gaps remained too wide, and that there was no option but to suspend the negotiations under the Doha Development Agenda as a whole to enable serious reflection by participants to review the situation, examine possible options and review positions. The report of the DG, WTO was taken note of by the General council on 27 July 2006.

A soft resumption of negotiations across the board was agreed on the basis of the TNC decision of 16 November 2006. However, it was only at the meeting of the General Council held on 7 February 2007, that the Chairman of the TNC could report a full-scale resumption of negotiations across the board. The Members then intensified their efforts to reach a decision on full modalities of negotiations on Agriculture & NAMA. The G-4 (Brazil, the European Communities, India and the United States) as well as the G-6 (G-4 plus Australia and Japan) held many meetings at both official and ministerial levels during the period February to June 2007 with a view to narrowing down the differences among Members especially on Agriculture. However, the last G-4 Ministerial meeting held in Potsdam (Germany) on 19-20 June 2007 failed to reach any agreement in this regard. Thereafter, the Agriculture negotiations chairperson Ambassador Crawford Falconer and non-agricultural market access (NAMA) chairperson Ambassador Don Stephenson circulated their own revised draft ''modalities'' on both these negotiations on 17 July 2007 for consideration of Members. These drafts are based on WTO member governments' latest positions in the negotiations as per the understanding of the two chairpersons and are an assessment of what might be agreed for the formulas for cutting tariffs and trade-distorting agricultural subsidies, and related provisions. Their release has kicked off another intensive series of meetings for WTO Members to try to reach agreement, and probably to amend the drafts. The Members are presently examining these two drafts. Serious negotiations will begin only after the resumption of work in WTO in September 2007.

India attaches utmost importance to a rule-based multiateral trading system. India will continue to protect and pursue its national interests in these negotiations and work together with other WTO Members, towards securing a fair and equitable outcome of these negotiations and also ensuring that the development dimension is fully preserved in the final outcome as mandated at Doha and reiterated in the July Framework Decision of 1 August 2004 and the Hong Kong Ministerial Declaration. Many of the elements and principles agreed so far are concrete expressions to deliver on the development promises of the Doha Round, including the elimination of the structural flaws in agricultural trade. The outcome of the negotiations should not undermine the ability of developing countries, like India, to safeguard the livelihood and food security of their poor farmers or to develop their industries and services sectors.

SPECIAL ECONOMIC ZONES

India was one of the first in Asia to recognise the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla in 1965. Seven more zones were set up thereafter. However, the zones were not able to emerge as effective instruments for export promotion on account of the multiplicity of controls and clearances, the absence of world-class infrastructure, and an unstable fiscal regime. While correcting the shortcomings of the EPZ model, some new features were incorporated in the Special Economic Zones (SEZs) Policy announced in April 2000. This policy intended to make SEZs an engine for economic growth supported

by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the State level, with the minimum possible regulations. The salient features of the SEZ Scheme are :-

- A designated duty free enclave to be treated as foreign territory only for trade operations and duties and tariffs.
- No licence required for import.
- Manufacturing or service activities allowed.
- SEZ units to be positive net foreign exchange earner within three years.
- Domestic sales subject to full customs duty and import policy in force.
- Full freedom for subcontracting.
- No routine examination by customs authorities of export / import cargo.

In order to impart stability to SEZ regime and to achieve generation of greater economic activity and employment through the establishment of SEZs, a Special Economic Zone Act has been enacted. The SEZ Act, 2005, supported by SEZ Rules, have come into effect on 10th February 2006. Incentives and facilities offered to units in SEZs under the Act, for promotion of investment, including foreign investment include: duty free import / domestic procurement of goods for development, operation and maintenance of SEZ units, 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years, exemption from Central Sales Tax, exemption from Service Tax and single window clearance mechanism for establishment of units.

All the 8 Export Processing Zones (EPZs) located at Kandla and Surat (Gujarat), Santa Cruz (Maharashtra), Cochin (Kerala), Chennai (Tamil Nadu), Visakhapatnam (Andhra Pradesh), Falta (West Bengal) and Noida (U.P.) have been converted into Special Economic Zones. Under SEZ Act, formal approvals have so far been given for setting up of 366 Special Economic Zones in the private / joint sector or by the State Governments and its agencies, which include the 142 approvals for which Notifications have been issued.

Benefit derived from SEZs is evident from the investment, employment, exports and infrastructure developments additionally generated. Investment of the order of Rs. 100,000 crores including FDI of US $ 5 - 6 billion is expected by the end of December 2007. 100,000 direct jobs are expected to be created by December 2007. The benefits derived from multiplier effect of the investments and additional economic activity in the SEZs and the employment generated thus will far outweigh the tax exemptions and the losses on account of land acquisition. Stability in fiscal concession is absolutely essential to ensure credibility of Government intensions.

(a) Exports from the functioning SEZs during the last three years are as under:

Year	Value (Rs. Crore)	Growth Rate (over previous Year)
2003-2004	13,854	39%
2004-2005	18,314	32%
2005-2006	22,840	24.7%
2006-2007	34,787	52 / 3%

Projected exports from all SEZs for 2007-08: Rs. 67088 crores

(b) Investment and employment in the SEZs set up prior to the SEZ Act, 2005:

At present, 1216 units are in operation in the SEZs. In the SEZs established prior to the Act coming into force, there are 1098 units providing direct employment to over 1.93 lakh persons; about 40% of whom are women. Private investment by entrepreneurs in these SEZs established prior to the SEZ Act is of the order of over Rs. 5844 crore.

(c) Investment and employment in the SEZs notified under the SEZ Act 2005:

Current investment and employment:

- Investment: Rs. 46075 crores
- Employment: 40153 persons

Expected Investment and employment (by December 2009):

- Investment: Rs. 2,83,219 crores
- Employment: 21,09,589 additional jobs

(d) Expected investment and employment if 366 formal approvals become operational:

- Investment: Rs. 3,00,000 crores
- Employment: 4 million additional jobs

Impact of the scheme

The overwhelming response to the SEZ scheme is evident from the flow of investment and creation of additional employment in the country. The SEZ scheme has generated tremendous response amongst the investors, both in India and abroad, which is evident from the list of Developers who have set up SEZs:

- Nokia SEZ in Tamil Nadu
- Quark City SEZ in Chandigarh
- Flextronics SEZ in Tamil Nadu
- Mahindra World City in Tamil Nadu
- Motorola, DELL and Foxconn
- Apache SEZ (Adidas Group) in Andhra Pradesh
- Divvy's Laboratories, Andhra Pradesh
- Rajiv Gandhi Technology Park, Chandigarh
- ETL Infrastructure IT SEZ, Chennai
- Hyderabad Gems Limited, Hyderabad

MMTC

MMTC Limited is India's largest trading company with an annual business turnover in the region of US $ six billion. It is the largest exporter of Minerals and Ores from India, leading exporter / importer of Agro commodities, single largest importer / supplier of Bullion, a major player in the Coal and Hydrocarbons and Non-Ferrous Metals imports by the country and one of India's largest buyers of Finished Fertilizers and Fertilizer Raw Materials. The company commands extensive market coverage in over 65 countries in Asia, Europe, Africa, Oceania and America, etc. The domestic network of MMTC in India spreads across 76 offices, warehouses and retail outlets.

MMTC, currently holding the no. 1 rank amongst trading companies in India, has in 2006-07 further improved upon its already impressive performance achieved

during the previous year. Against business volumes of Rs. 16,362 crore reached during 2005-06 MMTC achieved a record breaking performance of Rs. 23,205 crore during 2006-07 which includes export performance of Rs. 3,427 crore, best ever import performance of Rs. 18,443 crore and domestic turnover of Rs. 1,334 crore.

As a strategy to diversify and add value to its trading operations, MMTC has set up Neelanchal Ispat Nigam Limited (NINL) - an iron and steel plant of 1.1 million tonnes capacity and a 0.8 million tonne coke oven plant with captive power plants, jointly with the Government of Orissa at a total capital outlay of nearly Rs. 2000 crore.

MMTC has also promoted a wholly-owned foreign subsidiary namely, MMTC Transnational Pte. Ltd (MTPL) based in Singapore as a part of its strategy to enhance its presence in South and South-East Asian Countries. The company holds the prestigious ''Global Trader Status'' awarded to it by Singapore Trade Development Board in 2000.

Besides keeping its position intact as the single largest international trader in the country for product lines like Minerals, Metals, Fertilizers, Precious Metals and as a major operator in Agro and Coal and Hydrocarbon sectors, the company also associates itself in promotion and development of trade-related infrastructure.

MMTC is making strategic investments in various trade-related infrastructure with a view to providing an impetus to its existing and proposed lines of business. Some of the initiatives taken are: setting up of free trade and warehousing zones at different locations in India as well as acquisition of coal mines in India and setting up of coal washeries in India. Other avenues of business diversification include setting up of wind energy farms and thermal power plants in India. A 0.50 million tonnes per annum capacity crushing and screening plant has been setup in Banihatti in the Bellary–Hospet Sector of Karnataka State to produce calibrated lumps to add value to iron ore exports. MMTC has also applied for iron ore mining leases and plans to set up pelletisation plants to enhance value of such mined ironore.

MMTC has already acquired railway rakes under the 'Own Your Wagon Scheme' of the Indian railways and contributed to the setting up of an iron ore jetty at Ennore Port to facilitate trade logistics and cut down transaction costs.

8 Communications

POSTS

THE establishment of the modern postal system in India can be traced back to the second half of the 18th century. This postal system, established by Lord Clive in the year 1766, was further developed by Warren Hastings by establishing the Calcutta G.P.O. under a Postmaster General in the year 1774. In the other Presidencies of Madras and Bombay, the General Post Offices came into existence in 1786 and 1793 respectively. The Act of 1837 first regulated the Post Office on a uniform basis to unite the post office organisation throughout the three Presidencies into one all-India Service. The Post Office Act of 1854 reformed the entire fabric of the postal system, and the Post Office of India was placed on the present administrative footing one hundred and fifty three years ago on 1st October 1854. The statute presently governing the postal services in the country is the Indian Post Office Act, 1898.

Besides providing postal communication facilities, the post office network has also provided facilities for remittance of funds, banking and insurance services from the latter half of the 19th century.

POSTAL NETWORK

At the time of Independence there were 23,344 post offices throughout the country. Of these 19,184 post offices were in the rural areas and 4,160 in the urban areas. As on 31.3.06 the country has 1,55,333 post offices, of which, 1,39,074 are in rural areas and 16,259 in urban areas. As a result of this seven-fold growth in the postal network, today India has the largest postal network in the world.

Expansion of the postal network especially in the rural areas, has to a great extent been brought about by opening part time Extra Departmental Post Offices, a system unique to the Department of Posts. Under this system, local residents are employed, subject to fulfilment of certain criteria, to man the post office for a period not exceeding five hours and to deliver and convey mails on payment of a certain allowance. On an average in India, a post office serves an area of 21.16 sq km, and a population of 6623. Post Offices are opened subject to satisfaction of norms regarding population, income and distance stipulated by the Department. There is an element of subsidy for opening post offices in rural areas, which is to the extent of 85% of the cost in hilly, desert and inaccessible areas, and 66 2/3% of the cost in normal rural areas.

The postal network consists of four categories of post offices, viz, Head Post Offices, Sub-Post Offices, Extra Departmental Sub-Post Offices and Extra Departmental Branch Post Offices. All categories of Post Offices retail similar postal services, while delivery function is restricted to specified offices. In terms of management control, accounts are consolidated progressively from Branch Post Offices to Sub-Post Offices and finally in Head Post Offices.

The Department has about 2.47 lakh departmental employees and about 2.93 lakhs Gramin Dak Sevaks as on 31.3.2005. Their training needs are met through a well-developed training infrastructure.

MAIL SYSTEM

First-class mail, viz., post cards, inland letter cards and envelopes, are given airlift wherever found advantageous, without any surcharge, between stations connected by air. Second-class mail, viz., book packets, registered newspapers and periodicals are carried by surface transport, i.e., trains and road transport.

The Department has handled about 670.07 crore pieces of mail during the year 2005-06. Out of this 536.55 crore constituted first-class mail that comprised household mail and official and business correspondence. Second-class mail was 133.52 crore. The volume of unregistered mails handled during 2005-06 was to the extent of 649.22 crore out of which rural mail constituted 246.39 crore and urban mail 402.83 crore. The registered mail handled during 2005-06 was 20.85 crore. Besides, the Department handled 9.58 crore money orders of total value of Rs.7183.43 crore during 2005-06.

INTERNATIONAL MAILS

India is a member of the Universal Postal Union (UPU) since 1876 and of the Asian Pacific Postal Union (APPU) since 1964. These organisations aim at extending, facilitating and improving postal relations among other countries. India exchanges mail with more than 217 countries by air and surface.

Money can be remitted from selected foreign countries to India by way of money orders. India has money order services with 27 countries. India has two way money order service with Bhutan and Nepal, wherein money orders can be sent to and received from these countries. With the remaining 25 countries, only inward service is available where money orders booked in these countries can be paid in India. The Department is considering introduction of electronic International Money Order service to provide fast, reliable and efficient money transmission service.

International EMS, which started in 1986 with five countries, has now been extended to 97 countries. With a view to facilitate export and import to and from foreign destinations, principal foreign offices of exchanges have been set up at Mumbai, Kolkata, Chennai and Delhi. In addition, six sub-foreign post offices have been established at Ahmedabad, Bangalore, Jaipur, Cochin, Srinagar and Noida for both import and export. Export Extension Windows have also been made operative at Varanasi, Kanpur, Surat, Ludhiana, Moradabad and Guwahati to cater to the needs of the exporters/tourists in these areas.

Modernisation and computerisation of foreign mail operations had been taken up in the 10th Five Year Plan for improving the quality of service in this area. Taking further steps to improve the quality, the Department of Posts had introduced 13-digit bar code labels for all international accountable articles from September 3, 2003. The application of barcodes on postal articles and the effective use of electronic track and trace systems enables both customers and the postal administrations to check whether the articles are in transmission or these have been delivered much better than is possible through the manual system of tracing such articles.

TECHNOLOGY INDUCTION

India Posts aims to provide enhanced customer and employee satisfaction along with increasing its revenue through induction of IT. The Department of Posts aims to leverage information technology to attain a position of leadership and excellence in delivery of postal services, transforming the Department to a modern communications and financial services agency. The key initiatives undertaken during the year 2006-07 are as under:

Computerisation and Networking of Post Offices: By the end of March 2007, the Department of Posts supplied computer and its peripherals like scanner weighing scales, modems, etc. along with requisite power equipment like Gensets, UPS, etc. to all Head Post Offices and a large number of sub post offices. A total of 8263 post offices have been computerised by March 2007. The National Information Centre (NIC) is also implementing a WAN (Wide Area Network) connecting all the Head Post Offices, Administrative Offices, Major Speed Post Centres and Accounts Offices. National Data Centre has also been set up at New Delhi and this Data Centre is being connected to the WAN. On being operational, the WAN will ensure a quantum jump in the quality of services being provided by the Posts Offices.

Modernisation of Operative Offices: Under the 10th Five Year Plan, to improve the ergonomics and ambience, 822 Post Offices were taken up for modernisation. This has resulted in better quality of counters, better furniture for customers and staff, proper illumination and uniform for both signages. The Department plans to take a quantum leap in its efforts to provide an electronic network of all Post Offices in the 11th Five Year Plan. It also plans to develop a single integrated software to link the data being received from all the Post Offices into a single repository, thereby empowering the customers and the managers.

MAIL

Computerisation of Registration Sorting: As a part of the modernisation of mail network, computerisation of the registration sorting work in major mail offices had been initiated during the financial year 1995-96 by computerising Registration Sorting work at Delhi, Mumbai, Hyderabad and Chennai. Registration sorting work in 154 mail offices has been computerized till 31.3.2007.

Computerisation of Head Record Offices (HROs) : As a part of modernisation programme, computerisation of the Head Record Office (HRO) for proper maintenance of records relating to mail operations, their prompt retrieval and efficient office management has been undertaken. A beginning in this regard was made during the financial year 1997-98 by computerising HROs, Hyderabad Sorting Division. All HRO in the country have been computerised by 31st March, 2007.

Modernisation of Mail Offices (improving ergonomics): To improve the ergonomics and working environment, mail offices are being modernised with better operational equipments and improved ambience. The project was started during the financial year 1995-96, when 22 Mail Offices were modernized. By 31st March 2006, 269 Mail Offices were modernized.

With an objective to consolidate mail network, reduce cost of operation and generate revenue from mail related business, Mail Business Centres (MBCs) are being established across the country. These centres would be equipped with state-of-the-art technology and would offer one-stop solution for varied needs of bulk customers. By 31st March, 2007, 90 MBCs have been opened subsequent to merger/closer of smaller mail office.

BUSINESS DEVELOPMENT ACTIVITIES

A Business Development Directorate was set up in 1996 with the objective of marketing and promoting premium services for meeting the needs of specific customer segments. It was reorganised into Business Development and Marketing Directorate w.e.f 1st April 2005, to provide a sharper focus on marketing of the whole continuum of postal products. A separate Parcel and Logistics Division has been created in the Business

Development and Marketing Directorate w.e.f 1st April 2005 to focus attention on parcel products. Some of the premium services offered by the Department are given below:

Speed Post: Speed Post service was introduced on 1st August 1986. Under this service, letters, documents and parcels are delivered within a given time frame failing which full refund of postage is given to the customer. The Speed Post Network comprises 266 National and 857 State Speed Post Centres. This service is also available internationally to 97 countries.

An Internet based track and trace service speed net was launched on 3rd January 2002. Apart from providing tracking facility for Speed Post articles to the customers, it also provides information to the management about the quality of service, business performance, marketing customer service etc. It is now operational from all 266 National Speed Post Centres and selected State Speed Centres.

Business Post: The Department launched Business Post with effect from 1st January 1997 in order to meet specific needs of bulk customers for pre-mailing activities. Accordingly, it provides value addition to all traditional services offered by the Post in the form of collection, insertion, addressing, sealing, franking etc. Recently, printing of bills, financial statements, mailers etc. have also been included among the pre-mailing services extended to customers under Business Post.

Bill Mail Service: Bill Mail Service was introduced w.e.f 15th September, 2003 to provide a cost effective solution for mailing of periodic communication in the nature of financial statements, bills, monthly account bills or other items of similar nature, which may be posted by service providers to their customers.

A National Bill Mail Service was launched in February 2005 that allows Bill Mail Service items meant for outstation destinations also to be bundled in package, which can be sent to destination cities as Speed Post, Express Parcel Post etc. article, on payment by the sender. The individual bills in the package are charged only at Local Bill mail service rates.

Express Parcel Post: The Express Parcel Post seeks to provide a reliable and time bound parcel service through surface transport. It provides door-to-door delivery and VPP service upto Rs 50,000 to cater to corporate users and business establishments on contractual basis. Express Parcel Post can be booked in 266 stations in the country, where National Speed Post Centres exist.

Logistics Post: A Logistics Post service was introduced by the Department in 2004-05. This service has already started in many Postal Circles. Logistics Post is designed to carry consignments from point to point without any maximum limit. Value added services like pick-up, delivery, track and trace are also being provided in Logistic Post.

Media Post: The Department offers a unique media to help the corporate and government organisations reach potential customers through Media Post. Under this facility, customers can use the following for their branding exercise: (a) Advertisement on Postcards, Inland Letter Cards, Aerogram and other Postal Stationery. (b) Space sponsorship options on letter-boxes.

Retail Post: Through its vast network of more than 1.5 lakh post offices, the Department offers the facility to collect all public utility bills and sale of application forms for government and other private organisations. Sale of application forms for UPSC etc., surveys through postmen, address verifications through postmen, collection of loan

applications through postal network etc. are some of the activities undertaken under Retail Post.

Direct Post: Many Countries have identified Direct Marketing/Advertising mail as an important component of business mail with high potential for growth. With high economic growth, Direct Mail volumes are expected to grow significantly in India also. A service called Direct Post was introduced w.e.f. 2nd June, 2005 to deal with delivery of un-adressed mail to the doorsteps of the target population. A new Direct Post value addition has also been introduced from 18th April, 2006, allowing advertising mail to be combined with transaction mail like bills etc.

e-Post: e-post service, launched on 30th January, 2004, utilises the last mile advantage provided by the Department to enable people to send and receive message or scanned images through e-mail in all post offices in the country. People who would not normally have access to internet are able to send and receive e-mail messages without possessing an e-mail ID, thereby bridging the digital divide. To make it useful for business also, a corporate version of e-post was also launched on 18th October, 2005, which allows simultaneous sending of e-post to a maximum of 9999 addresses.

e-Bill Posts : A new service, called e-bill Post has been launched by the Department as one of the technology enabled services for the customers. Presently this service is available at Bangalore and Kolkata and is likely to start in other cities very soon. This has been designed keeping in view the requirements of the clients. The service is useful for payment of electricity, telephone, mobile, water and other kinds of bills/ dues at the Post Office counters by the users. The user can go to a nearby Post Office and pay their utility bills.

PHILATELY

Indian postage stamps provide a kaleidoscopic glimpse of our historical and natural heritage and the rich diversity of our culture and traditions. Covering a wide range of themes, the stamps also commemorate important national and international events, the contributions of renowned personalities and institutions and our achievements in various fields like sports, arts, science and technology etc. These stamps are very popular.

During the year 2006, the Department issued 65 special/commemorative postage stamps. Some of the notable themes include – Pongal (a famous festival in South India), Indian Agricultural Research Institute (completion of 100 years) Kurniji (the flower which blossoms every 12 years), Rain Water Harvesting, Vellore Mutiny 1866, Pankaj Kumar Mullick (a great music maestro), Oil and Natural Gas Company (goldern jubilee), University of Madras (completion of 150 years), a set of four stamps with miniature sheet of Endangered Birds of India, a set of five stamps on Himalayan Lakes, a set of two stamps with miniature sheet on Children's Day, World Aids Day, and Stop Child Labour. The Department also issued joint stamps with Cyprus and Mongolia on the themes of Folk Dance and Ancient Horse respectively. The Department also issued a fragrant/scented stamp, first of its kind in India, on sandalwood.

The National Philately Museum, New Delhi, also remained a hub of philatelic activities during this period. The concept of thematic exhibition of stamps was introduced with the first such event dedicated on Mahatma Gandhi featuring 'Retrospect on Mahatma Gandhi'. The exhibition was inaugurated by Ms. Nirmala Deshpande, the noted Gandhian. Stamps from India and abroad dedicated to Bapu were on display. A range of sovereigns and gifts were also introduced in the Philatelic

Museum on this occasion. Images of stamps were brightly printed on glass, and were nicely framed. It aroused significant public interest. Similarly, stamps on gems and jewellery were beautifully copied on marble. Image of Mahatma Gandhi stamps on piece of Khadi was also aprreciated. All these are available for sale in the National Philatelic Museum. The Department revived another philatelic product maxim cards, during this year with the issue of stamps on Endangered Birds of India, Himalayan Lakes and Children's day.

The philatelic items like commemorative postage stamps, miniature sheets, first day covers, information brochures, post cards and maxim cards etc. are available through 68 Philatelic Bureaux and 881 Philatelic Counters across the country.

FINANCIAL SERVICES

(i) Post Office Savings Bank: The Post Office Savings Bank (POSB) operates the Small Savings Schemes of Govt. of India, Ministry of Finance, on an agency basis. In terms of its existing mandate, the POSB is fully geared to meet the banking requirements of small investors, particularly those who cannot readily access the commercial banks. The POSB operates out of more than 1.54 lakh Post Offices spread across the country. The rural network of POSB itself extends to as many as 1,38,529 branches. At present the schemes being operated through POSB are: Savings Account Schemes, Recurring Deposit Schemes, Time Deposit Schemes (1,2,3 & 5 years), Monthly Income Schemes, Public Provident Fund Schemes, Kisan Vikas Patras Scheme, National Savings Certificate (VIII Issue) and Senior Citizens' Savings Schemes-2004.

(ii) Money Order: A "Money Order" is an order issued by the Post Office for payment of a sum of money through the agency of Post Office. The amount for which a single money order may be issued must not exceed Rs. 5000/-. This service is available in more than 1.5 lakh Post Offices covering every hook and corner of the country. This allows customers to remit their money anywhere in India without any haste and with ease and they can receive money at their doorstep.

OTHER NEW FINANCIAL SERVICES

(i) International Money Transfer Service: This service, operated in association with a multinational company, Western Union Financial Services International, provides to customers the facility of receiving remittances from 205 contries and territories on a real time basis. The service is currently available in more than 8565 Post Offices. The service has provided the common man who has no bank account or access to Internet, a viable channel for receiving remittances from their relatives and family members abroad. The Department received the award in the years 2004 and 2005 for "Highest Growth in Transactions".

(ii) Instant Money Order (iMO): Instant Money Order (iMO) is an online domestic money transmission service intended for a market clientele requiring instant money remittance. This service enables the customers to receive money in minutes from any of the Post Offices providing iMO service. The service was introduced on 20th Jan., 2006. Under this service, a person can send amount from Rs. 1000/- up to Rs. 50000/- in one transaction. Money will be disbursed to the payee at any of the iMO Post Offices in India other than the office of booking on presentation of 16 digit iMO number and photo identity proof. Currently, the service is being offered in more than 400 Post Offices across the country. This service is being further expanded.

(iii) Postal Finance Marts: The concept of setting up Postal Finance Marts'(PFM) envisages providing specialized value added financial services, in conformity with market standards, in a customer friendly environment, in an ergonomically improved

Post Office. The PFM seeks to offer all the financial products and services of the Department under on one roof "One Stop Shop for Financial Services" – in a fully computerized office supported by technology, at par with reputed banking institutions. The PFM is a brand positioning exercise of financial services offered by the Post Office Savings Bank on the lines of the personalized services offered by the banks to customers. Therefore, the facilities offered through PFM are distinct from the services offered through Post Offices not merely in terms of ambience but also in the provision of specialized facilites like ' Investment Desk, AMFI qualified staff etc. The PFM will provide POSB services like Saving sBank, Recurring Deposit, Monthly Income Scheme, Term Deposit, Sr. Citizen Saving Schemes, National Savings Certificate (VIII issue), Kisan Vikas Patra, as well as other financial services like Postal Life Insurance & Non-life insurance, Mutual Funds & Bonds, Government Securities, Pension schemes, International Money Transfer, Money Order etc.

(iv) Retailing of Mutual Funds and Bonds: The Mutual Funds industry is making rapid strides with nearly Rs. 3,26,388 crore assets under management as on 31st March 2007. Since February 2001, a growing network of over 250 Post Offices are distributing select mutual funds (Principal-PNB/ Prudential-ICICI/UTI/SBI). In September 2004, the Department entered into a tie-up with UTI Mutual Funds, the largest player in the mutual fund market. The Department is retailing mutual funds of SBI, Principal PNB and Franklin Templeton, apart from UTI schemes. The service while extending the reach of the capital market of the country also provides the common man with easy access to market based investment options.

(v) Oriental Accidental Death Insurance Cover to POSB account holders: The Department, in a tie up with Oriental Insurance Company Limited (IOC), is providing Oriental Accidental Death Insurance for SB/MIS/SCSS account holders on request basis. On 20th Jan., 2006 this service was launched and is an add on product to the products already provided by OIC for sale from Post Office. It is a step in the direction of providing value addition to Post Office Savings Bank customers.

The schemes provide Accidental Death Insurance cover for one year of Rs. One lakh at low premium of Rs. 15/- for the entire year. It is very attractive to Post Office Savings Bank customers especially in rural and remote areas, as most of them do not have any risk cover whatsoever.

(vi) National Rural Employment Guarantee Act (NREGA): The Govt. of India enacted the National Rural Employment Guarantee Act in Sept., 05 that seeks to provide at least 100 days of guaranteed wage employment in every financial year to every household. On 2nd Feb. 06 Govt. of India introduced NREGA in 200 identified districts in 27 States in the country beginning with the state of Andhra Pradesh to provide wage employment to skilled/semi-skilled/unskilled labourers. AP circle entered into an agreement with the State Government for the implementation of NREGA through Post Offices in Andhra Pradesh. Under the agreement, the Post Offices in Andhara Pradesh do wage disbursal once in a week or fortnight to the wage earners through Post Office Savings Bank accounts. Subsequently, NREGA has been started in 49 districts of 4 more circles of Jharkhand, Karnataka, Madhya Pradesh and West Bengal

(vii) ECS Schemes : The ECS scheme provides an alternative method of effecting bulk payment transaction like periodic (monthly/quarterly/half-yearly/yearly) payment of interest/salary pension/commission/dividend/refund by Banks/ Companies/Corporations/Government Departments. This scheme obviates the need

for issuing and handling paper instruments and thereby facilitates improved customer service by the Banks and Companies/Corporations/Government Departments effecting bulk payments. The Scheme is in operation at 15 centres where Reserve Bank of India manages Clearing Houses and 31 centres where State Bank of India/ State Bank of Indore is managing them.

The Electronic Clearance Service scheme is being offered in the Department of Posts at all 15 locations of RBI in connection with payment of monthly interest under "Monthly Income Scheme" (MIS).

(viii) Dematerialization of NSC/KVP : In October 2003 the Department took an initiative after the approval of Ministry of Finance and the then MOC & IT to start a six-month pilot project on 'Dematerialization of Savings Certificate (NSC/KVP)' as a step towards streamlining of work procedures relating to issue and discharge of certificates, creation of highly secure and centralized records maintenance and MIS system through NSDL, operations through modernisation and rationalization of operations and ensuring investors' convenience. The Dematerialization of Savings Certificate was taken up in 10 Post Offices in Mumbia w.e.f 16th October 2003 and further extended to 25 more Post Offices on 12th February 2004.

POSTAL LIFE INSURANCE

Postal Life Insurance (PLI) was introduced in 1884 as a welfare measure for Postal employees. Over the years, it was extended to the employees of Central/State Governments, Public Sector Undertakings, Universities, Government-aided institutes, nationalised banks, financial institutions and Gramin Dak Sevaks of the Postal Department.

PLI offers six insurance schemes, namely, (1) Suraksha (Whole Life Assurance); (2) Suvidha (Convertible Whole Life Assurance); (3) Santosh (Endowment Assurance); (4) Sumangal (Anticipated Endowment Assurance); and (5) Yugal Suraksha (Joint Life Endowment Assurance for couple) and (6) Children Policy. As on March 2006. The total number of active policies stood at 30,98,248.

The Rural Postal Life Insurance (RPLI) was introduced by the PLI organisation on 24th March 1995, to provide insurance cover at low premium to the common man and to weaker sections of the society in rural areas. It is now allowed to continue on permanent basis. There are six types of plans under RPLI, namely, (1) Gram Suraksha (Whole Life Assurance); (2) Gram Suvidha (Convertible Whole Life Assurance); (3) Gram Santosh (Endowment Assurance) (4) Gram Sumangal (Anticipated Endowment Assurance); (5) Gram Priya (10 year Anticipated Endowment Assurance) and (6) Children Assurance. As on March 2006. The total number of active policies were 47,02,776.

During the year 2006-07 approximate business worth Rs. 4,446 crores in respect of 3,38500 PLI Policies and Rs. 10,636 crores in respect of 17,43,700 RPLI policies were secured.

CUSTOMER CARE

Since 1948, the Department of Posts has a well-established system of redressal of public grievances and presently has 1116 Computerised Customer Care Centres (CCCs) at the District Headquarters/Divisional Headquarters. This network covers all Head Post Offices in the country with the objective of providing easy and speedy access to information and help required by the customer, apart from redressal of grievances. Each post office works as a receiving point for complaints making the system readily

accessible for the customer. Since 2001, the Department has introduced the facility for customers to register their complaints online at its website www.indiapost.gov.in. and since 2003, it has developed a web-based system to interconnect its Customer Care Centres to redress grievances rapidly. The Department is implementing its Citizen Charter in all Head Post Offices and Large Sub Post Offices. It is implementing the Charter in other sub offices in mission mode. The Department has also initiated pro-active steps of reaching out to its customers for their feedback through personal visits, telephone calls and questionnaires.

With a view to bringing about qualitative change in its service, having focus on the customer, India Post has taken the initiative for implementation of "Sarvottam", the Public Service Delivery Excellence Model developed by the Department of Administrative Reforms & Public Grievances and backed by the Service Quality Management System Standard IS 15700:2005. To start with, the New Delhi GPO and Alwar HO (Rajasthan) have been identified for obtaining "Sarvottam" certificate after completion of requisite formalities.

Right to Information Act, 2005: In addition to the implementation of RTI Act, 2005 within the Department, India Post is also providing a service to the general public under which the RTI application meant for certain specified central public authorities of other Ministries/Departments and organisations can be submitted to the designated CAPIOs at districts/sub-district level Post Offices. The applications so received would be promptly forwarded by the CAPIO to the concerned public authorities, with an acknowledgement to the applicant. At present, this service is available at 629 district level post offices and about 3000 Tehsil level post offices and in respect of 120 public authorities of Central Government.

TELECOMMUNICATIONS

The Telecommunication services were introduced in India soon after the invention of telegraphy and telephone. The first Telegraph line between Kolkata and Diamond Harbour was opened for traffic in 1851. By March 1884, telegraph messages could be sent from Agra to Kolkata. By 1900, telegraph and telephone had started serving Indian Railways. As in the case of telegraph, telephone service was also introduced in Kolkata in 1881-82, barely six years after the invention of telephone. The first automatic exchange was commissioned at Shimla in 1913-14 with a capacity of 700 lines.

The Telecommunication services in India have improved significantly since independence. With the opening of Telecom sector to private investment and establishment of an independent regulator, the matter of separation of service provision functions of the Department of Telecommunications (DoT) and providing a level playing field to various service providers including the Government service Provider, has been achieved. On 1 October 2000 a new public Sector Undertaking, viz. Bharat Sanchar Nigam Limited (BSNL), has been formed to take over all the service providing functions of the erstwhile Department of Telecommunication Services (DTS).

Initially, the telephone exchanges were of manual type, which were subsequently upgraded to Automatic Electro-Mechanical type. In the last one-and-a-half decades, a significant qualitative improvement has been brought about by inducting Digital Electronic Exchanges in the network on a very largescale. The number of departmental exchanges which was around 321 as on 31 March 1948, has increased to 38338 by March 2007. Today all the telephone exchanges in the country are of electronic type.

By the end of 2006-07 India was the 3rd largest telecom network in the world measured in terms of number of phones. As on 31 March 2007, the network comprises of 206.83 million telephone connections and over 2.36 (March 2007) million Public Call Offices (PCOs). There are over 166.05 million Wireless phone subscribers in the country and the Wireless phone customer base is growing at the rate of over five million per month. In the field of basic telecom service, there are two public sector licences at the end of March 2007 and 75 private Service Licences. Further, in the area of Wireless phones telephone, of the total 77 licences, 54 were in the private sector and 23 in public sector. Of the total roll out of telephone connections (basic and Wireless phone) as on 31 March 2007, private sector accounted for more than 65 per cent and public sector accounted for about 35 per cent.

Fully automatic International Subscriber Dialling (ISD) services is available to almost all the countries. The total number of stations connected to national Subscriber Dialling (NSD) is over 31,686. In the field of International communications, tremendous progress was made by the use of satellite communication and submarine optical fibre links. The voice and non-voice telecom services, which include data transmission, facsimile, Wireless phones radio, radio paging and leased line service, cater to a wide variety of needs of both residential and leased line service, cater to a wide variety of needs of both residential and business customers. Integrated Services Digital Network (ISDN) facility is available in a number of cities. A dedicated Packet Switched Public Data Network with International access for computer communication services is also made available.

REGULATORY FRAMEWORK IN THE TELECOM SECTOR

In early 1997, the telecom Regulatory Authority of India (TRAI) was established under the Telecom Regulatory Authority of India Act, 1997 to regulate the telecommunications services and for matters connected therewith or incidental thereto. The establishment of the regulator was considered necessary in the context of liberalization and private sector participation in the telecom sector and to provide a level playing field for all operators.

By amendments made in early 2000 to the TRAI Act, the entire telecom regulatory framework, and the disputes settlement mechanism were strengthened. Besides bringing about clarity in the role and functions of the Regulator (TRAI), certain additional functions were also entrusted to it. A separate disputes settlement body known as the Telecom Disputes Settlement and Appellate Tribunal was also constituted for expeditious settlement of disputes. Vide a notification dated 9 January 2004 of the Government of India, Broadcasting and Cable Services also have been brought within the definition of ''Telecommunication Services''.

TARIFF REBALANCING MEASURES

In response to the policy changes in the Indian Telecom Sector, the tariff structure has been altered substantially. The tariff regulation for the telecommunications services in India was initiated with the notification of Telecommunication Tariff Order 1999 by the Regulator (TRAI). This Order provided the broad and long term tariff policy framework for telecommunications services in the country. The tariff envisaged in the Order included rebalancing towards costs while emphasizing the social objective of encouraging low users of telecom to get connected and use the system more intensively. Over a period of time, this rebalancing exercise has resulted in reduction of NLD and ISD tariffs considerably. In the area of Cellular telephony also, the tariff rates have decreased substantially. The impact of the various regulatory measures is very much

visible in the Indian telecommunication sector. We have succeeded in achieving affordable tariffs and also putting in place a transparent subsidy mechanism for implementation of policies to meet social objectives. The Policy has succeeded in providing the financial sustainability of the operators, promoting efficiency in the sector and meeting the social objectives. The results are evident from the phenomenal growth in subscriber base and the decline in tariffs. The initiatives taken by TRAI to achieve the set objectives include a cost based Interconnection Usage Charges (IUC) regime and Calling Party Pays (CPP) regime. TRAI continues to monitor tariffs for Telecommunication services and the Quality of Services. While following the policy of tariff forbearance, for segments where the competition is perceived to be insufficient, TRAI has prescribed celling tariffs. Thus, tariff for rural areas, roaming services and leased circuits continue to be regulated.

GRAMEEN SANCHAR SEVAK (GSS) SCHEME

Grameen Sanchar Sevaks (GSSs) carry a mobile fixed wireless terminal (FWT) with display unit and visit door to door to provide telephone facility franchisee basis. It is implemented in whole country except in A&N, Haryana & Punjab which are already having sufficient/full coverage.

As on 28.2.2007 around 11,872 villages are covered by 2,728 GSSs throughout the country. The GSS is entitled to 20% commission on all outgoing calls. The GSS can charge Rs. 5/- for passing on the message to the concerned persons in the village.

Around 2,150 FWTs have already been made available to NGO in West Bengal and the vcall rate of this scheme is more. Sanction of provision of telecom facilities in rural areas by NGOs has already been approved in Orissa, Jharkhand and Uttaranchal telecom circles. The process will help in employment of unemployed youth, both men and women, in the rural areas.

UNIVERSAL SERVICE OBLIGATION FUND

1.0 USO AND DISBURSEMENT OF FUND

1.1 The Universal Service Support Policy came into effect from 01.04.2002. The guidelines for universal service support policy were issued by DoT and were placed on the DoT website www.dot.gov.in on 27th March 2002. Subsequently, the Indian Telegraph (Amendment) Act, 2003 giving statutory status to the Universal Service Obligation Fund (USOF) was passed by both Houses of Parliament in December 2003. The fund is to be utilized exclusively for meeting the Universal Service Obligation and the balance to the credit of the Fund will not lapse at the end of the financial year. Credits to the Fund shall be through Parliamentary approvals. The Rules for administration of the Fund known as Indian Telegraph (Amendment) Rules, 2004 were notifies on 26.03.2004.

1.2 An Ordinance was promulgated on 30.10.2006 as the Indian Telegraph (Amendment) Ordinance 2006 to amend the Indian Telegraph Act, 1885 in order to enable support for mobile services and broadband connectivity in rural and remote areas of the country. Subsequently, an Act has been passed on 29.12.2006 as the Indian Telegraph (Amendment) Act 2006 to amend the Indian Telegraph Act, 1885. The Rules for administration of the Fund under this Ordinance, Indian Telegraph (Amendment) Rules 2006 have been published on 17.11.2006.

1.3 The resources for implementation of USO are raised through a Universal Service Levy (USL) which has presently been fixed at 5% of the Adjusted Gross Revenue

(AGR) of all Telecom Service Providers except the Pure value added service providers like Internet, Voice Mail, E-Mail service providers etc. In addition, the Central Govt. may also give grants and loans.

1.4 The Universal Service Obligation Fund is headed by the Administrator, USF. He is empowered to formulate procedures for implementation of the USO and disbursement of funds from the USOF. His office functions as an Attached office of the Department of Telecom, Ministry of Communications & IT.

2.0 USO ACTIVITIES

As per the Rules, the following services shall be supported by the Fund, namely -

(i) Stream-I : Provision of Public telecom and Information Services -

(a) Operation and maintenance of Village Public telephone in the revenue villages identifies as per Census 1991 and Installation of Village Public Telephone in the additional revenue villages as per Census 2001 :

For installation of Village Public Telephone in the revenue villages, identified as per 1991 Census, only the Operating Expenses and Revenue shall be taken into account for determining the Net Cost. For the additional revenue villages identified as per 2001 Census, Capital Recovery in addition shall also be taken into account for determining the Net Cost :

Provided that in the case of the Village Public Telephone which are still to be installed in the villages identified as per Census 1991, Capital Recovery shall also be taken into account while determining the Net Cost;

(b) Provision of additional rural community phones in areas after achieving the target of one Village Public Telephone in every revenue village :

Where in a village the population is more than 2000 and no public call office is existing, a second public phone shall be installed and for the purposes of determining the net Cost, Capital Recovery, Operating Expenses and Revenue shall be taken into account;

(c) Replacement of Multi Access Radio Relay Technology Village Public Telephone installed before 1st day of April 2002:

Capital Recovery, Operating Expenses and Revenue shall be taken into account for determining the Net Cost.

Note - Unless otherwise specified by the Central Government, the Secondary Switching Area shall be taken as a unit for the purpose of arriving at net Cost for activities specified in items (a) to (c) of stream 1.

(ii) Stream-II - Provision of household telephones in rural and remote areas as may be determined by the Central Government from time to time :

(a) For household Direct Exchange Lines installed prior to 1st day of April, 2002, the difference in rental actually charged from rural subscribers and rent prescribed by Telecom Regulatory Authority of India for such subscribers shall be reimbursed until such time the Access Deficit Charges prescribed by telecom Regulatory Authority of India from time to time take into account such difference.

(b) For household direct Exchange Lines installed after 1st day of April , 2002, Capital Recovery, Operational Expenses and Revenue shall be taken into account to determine the Net Cost.

Unless otherwise specified by the Central Government, the Short Distance

Charging Area shall be taken as a unit for the purpose of arriving at the Net Cost for activities specified in item (b) of Stream II.

(iii) Stream-III: Creation of infrastructure for provision of Mobile Services in rural and remote areas:

(a) The assets constituting the infrastructure for provision of mobile services shall be determined by the Central Government from time-to-time.

(b) A percentage of the Capital Recovery for the infrastructure for provision of mobile services shall be taken into account to determine the Net Cost.

(iv) Stream-IV: Provision of Broadband connectivity to villages in a phased manner

A percentage of the Capital Recovery for the infrastructure for broadband connectivity shall be taken into account to determine the Net Cost.

(v) Stream-V : Creation of general infrastructure in rural and remote areas for development of telecommunication facilities

(a) The items of general infrastructure to be taken up for development shall be determined by the Central Government from time to time.

(b) A percentage of the Capital Recovery for the development of general infrastructure shall be taken into account to determine the Net Cost.

Unless otherwise specified by the Central Government, the revenue district/ group of revnue districts shall be taken as a unit for the purpose of arriving at the Net Cost for the ctivities specified in Streams III, IV & V.

(vi) Stream-VI: Induction of new technological developments in the telecom sector in rural and remote areas

Pilot projects to establish new technological developments in the telecom sector, which can be deployed in the rural and remote area, may be supported with the approval of the Central Government.

3.0 IMPLEMENTATION STATUS

(A) PUBLIC (SHARED) ACCESS

• Village Public Telephones

USO Fund is providing financial support for operation and maintenance of about 5,61,000 village Public Telephones (VPTs), covering more than 90% of the eligible villages, where VPTs are to be provided. About 8,713 VPTs have been provided by Private Basic Service Operators. Agreements were signed with M/s BSNL and six Private Basic Service Operators in March 2003 for maintenance of existing VPTs across the country. Subsidy support is being provided for operation and maintenance of existing Village Public Telephones (VPTs) in the identified revenue villages as per Census 1991 and installation of VPTs in additional revenue villages as per Census 1991 and installation of VPTs in additional revenue villages as per census 2001. The details of VPTs being maintained by Universal Service Providers (USPs), namely, M/ s BSNL (www. bsnl.co.in), RIL (www.relianceinfocom.com), TTL & TTL (MH (www.tatateleservices.com), Bharti (www.airteltelephone.com), HFCL (www.hfclconnect.com) and Shyam Telecom (www.hellorainbow.com) are available on the respective websites of these service providers.

• New VPTs in the Uncovered villages

For the remaining uncovered eligible 66,822 villages as on June 2004, agreements have been signed with M/s BSNL in November 2004 to provide VPTs in such villages. Insurgency prone villages are not to be covered as per present Policy. Subsidy support in the form of Capital and Operational expenses will be provided for provision of these VPTs for a period of five years from the date of installation of the VPTs. Out of 66,822 VPTs, 14,183 VPTs are to be provided on satellite based media and the remaining 52,639 shall be provided on other technologies. 20% of these VPTs i.e. 13,364 were to be provided by M/s BSNL by November 2005, another 40% i.e. 26728 by November, 2006 and 40% i.e. remaining 26,728 by November, 2007. As against this target, 47747 VPTs have already been provided by M/s BSNL till April 2007 **(Refer Table I)**. The remaining villages are likely to be provided with VPT by november 2007. The provision of VPTs in these villages has been included as one of activities under Bharat Nirman Programme. The details of the villages to be covered under this programme are placed on the DoT website www.dot.gov.in & Bharat Nirman website www.dot.gov.in/bharatnirman.htm.

• New VPTs in the Uncovered villages

For the remaining uncovered eligible 66,822 villages as on June 2004, agreements have been signed with M/s BSNL in November 2004 to provide VPTs in such villages. Insurgency prone villages and those with population less than 100 totaling about 24,000 villages are not to be covered as per present Policy. Subsidy support in the form of Capital and Operational expenses will be provided for provision of these VPTs for a period of five years from the date of installation of the VPTs. Out of 66,822 VPTs, 14,183 VPTs are to be provided on other technologies. 20% of these VPTs i.e. 13,364 were to be provided by M/s BSNL by November 2005, another 30$ i.e. 26728 by November, 2006 and 40% i.e. remaining 26,728 by November, 2007. As against this target, 47747 VPTs have already been provided by M/s BSNL till April 2007 **(Refer Table I)**. the remaining villages are likely to be provided with VPT by November 2007. The provision of VPTs in these villages has been included as one of activities under Bharat Nirman Programme. The details of the villages to be covered under this programme are placed on the DoT website www.dot.gov.in & Bharat Nirman website www.dot.gov.in/bharatnirman.htm.

• Replacement of MARR based VPTs

1,86,872 no. of VPTs which were earlier working on Multi Access Radio Relay. (MARR) technology and installed before 01.04.2002 are to be replaced as most of these were non functional. Both capital and operational expenses are to be supported for this activity. 1,75,522 MARR VPTs have been replaced by M/s BSNL till April 2007 **(Refer Table II)**

• Provision of Rural Community Phones

46,253 villages with population exceeding 2,000 and without a Public phone facility are being provided with a Rural Community Phone (RCP). Agreements were signed with M/s BSNL and M/s RIL in September 2004 to provide 24,822 and 21,431 RCPs respectively in these villages over a period of three years. These installations are eligible for both Capital and Operational expenses. 36,618 RCPs (BSNL: 21,552, RIL: 15,066] have been provided till April 2007 and the remaining RCPs are likely to be provided by September 2007 **(Refer Table III).**

(B) INDIVIDUAL ACCESS

• RDELs (014.05 to 31.03.07)

Agreements were signed in March 2005 for providing subsidy support towards installation of Rural Household Direct Exchange lines (RDELs) to the individual customers in Rural Areas. The support for these RDELs was extended to cover 1685 Short Distance Charging Areas (SDCAs), which are High Cost Low Income Areas out of a total of 2647 SDCAs in the country. This covered about 64% of the total geographical area covered by telecommunications. BSNL emerged as successful bidder in 1267 SDCAs of the total tendered SDCAs while M/s Reliance, M/s Tata Teleservices Ltd. and M/s TTL (MH) had been successful in 203, 172 and 43 SDCAs. Support in the form of front loaded subsidy and an equated annual subsidy is being given for all the lines (RDELs) installed after 01.04.2005 and up to the plan period i.e. 31.03.2007. The equated annual subsidy where payable, shall be given up to a maximum period of validity of the Agreement (Five years) and validity period ends in March, 2010. As per the Agreement conditions, the Service Provider had to provide at least 100 lines per Secondary Switching Area (SSA) within six months. Thereafter all the wait listed subscribers were to be provided with a telephone connection on demand within three months of registration. About 25,64,577 RDELs were provided [M/s BSNL (8,91,306), M/s RIL (7,37,207), M/s TTL (7,26,915) and M/s TTL (MH) (2,09,149)] during the period of the Agreement i.e. 01.04.2005 to 31.03.2007. **(Refer Table IV).**

• RDELs (01.04.02 to 31.03.05)

Support is also being extended for 18.65 lakhs rural lines at the same rates installed between 01.04.2002 and 31.03.2005. Agreements to this effect have also been signed with M/s BSNL and M/s RIL in May 2005 and August 2005. the equated annual subsidy is to be given for a maximum period of five years from the date of installation of these RDELs. One time front loaded subsidy is payable only for net addition of rural household DELs in a local exchange area.

• RDELs (Prior to 01.04.02)

One time financial support has also been provided to nearly 90.5 lakhs rural household DELs (Direct Exchange Lines) from USO Fund for the period 01.04.2002 to 31.01.2004 which had been installed in the country prior to 01.04.2002 as per rules. The Access Deficit Regime has come into operation from 01.02.2004.

4.0 USO LEVY COLLECTIONS

The contribution from Service Providers towards USO collected as Universal Service Levy from 01.04.2002 has been Rs. 1653.61 Crore in 2002-03, Rs. 2143.22 Crore in 2003-04, Rs. 3457.73 Crore in 2004-05, Rs. 3533.29 Crore in 2005-06 and Rs. 4211.13 Crore in 2006-07.

5.0 DISBURSEMENTS MADE

5.1 The entire budgetary provision of Rs. 5081.44 Crore allocated for the financial years 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 was fully utilized (Rs. 300, 200, 1314.59, 1766.85 and 1500 Crore) **(Refer Table V & VI).** A sum of Rs. 1800 Crore has been allocated for the Financial Year 2007-08.

6.0 ACTIVITIES BEING TAKEN UP BY USOF

6.1 Infrastructure Support for Cellular Mobile Services

As per Stream-III of the Indian Telegraph (Amendment) Rules 2006, a scheme has

recently been launched by the Government to provide subsidy support for setting up and managing 7871 number of infrastructure sites spread over 500 districts in 27 states **(Refer Table VII).** About 2.12 lakh villages are likely to be covered under this scheme. The infrastructure so created shall be shared by three service providers for provision of mobile services including other Wireless Access Services like Wireless on Local Loop (WLL) using Fixed/Mobile terminals in the specified rural and remote areas, where there is no existing fixed wireless or mobile coverage. The agreements effective from 01.06.2007 have been signed with the successful bidders in the third week of May 2007. Mobile services through these shared towers are targeted to be made operational in a phased manner and are likely to be completed by June 2008. It is estimated that additional capacity of 23 million new lines shall be created through the infrastructure so created under this scheme.

6.2 Broadband Connectivity for Rural Areas

With the aim to provide e-governance and data services to the rural masses, a proposal is also under consideration of the Government to provide subsidy support for Broadband connectivity in rural and remote areas of the country in a phased manner by utilizing the infrastrudure created for provision of mobile services. The broad parameters under which the connectivity is required to be provided are being worked out. The detailed scheme in this regard shall be prepared taking into consideration the views, suggestions and comments from the stakeholders. This programme will cover Common Service Centers (CSCs) being set up by DIT, school, colleges, primary health centers and Gram panchayats in a phased manner.

6.3 For creation of general infrastructure for development of telecom facilities and for induction of new technological developments in the telecom sector in rural and remote areas, USOF has initiated dialogue for identifying projects and implementing them.

TABLE I - VILLAGE PUBLIC TELEPHONES - DETAILS OF UNCOVERED VILLAGES AS ON 31-03-2007

Sl. No.	Name of the Service Area	Total No. of uncovered villages	To be provided on Satellite Media	To be provided on other technologies	VPTs provided	Balance remaining uncovered
1	Andaman & Nicobar	0	0	0	0	0
2	Andhra Pradesh	1074	115	959	597	477
3	Assam	8931	279	8652	8349	582
4	Bihar	0	0	0	0	0
5	Jharkhand	1694	1694	0	729	965
6	Gujarat	4144	0	4144	3381	763
7	Haryana	0	0	0	0	0
8	Himachal Pradesh	1002	275	727	816	186
9	Jammu & Kashmir	1755	465	1290	1127	628
10	Karnataka	0	0	0	0	0
11	Kerala	0	0	0	0	0
12	Madhya Pradesh	11894	443	11451	11573	321
13	Chhattisgarh	5043	88	4955	2855	2188
14	Maharasthra	6441	496	5945	5440	1001

15	Meghalaya (NE-1)	1957	500	1457	182	1775
16	Mizoram (NE-1)	96	20	76	10	86
17	Tripura (NE-1)	75	58	17	69	6
18	Arunachal Pradesh (NE-II)	646	543	103	164	482
19	Manipur (NE-II)	876	730	146	433	443
20	Nagaland (NE-II)	28	16	12	15	13
21	Orissa	4899	4899	0	518	4381
22	Punjab	0	0	0	0	0
23	Rajasthan	12386	18	12368	10023	2363
24	Tamil Nadu	0	0	0	0	0
25	Uttar Pradesh (East)	0	0	0	0	0
26	Uttar Pradesh (West)	0	0	0	0	0
27	Uttarakhand	3881	3544	337	1466	2415
28	West Bengal	0	0	0	0	0
	Total	**66822**	**14183**	**52639**	**47747**	**19075**

TABLE II VILLAGE PUBLIC TELEPHONES - DETAILS OF MARR REPLACEMENT AS ON 31-03-2007

Sl. No.	Service area	Total MARR VPTs to be replaced	MARR VPTs Replaced	Balance to be replaced
1	Andaman & Nicobar	71	71	0
2	Andhra Pradesh	10446	9851	595
3	Assam	9294	8678	616
4	Bihar	7707	7569	138
5	Jharkhand	3475	3310	165
6	Gujarat	4107	3962	145
7	Haryana	1335	1335	0
8	Himachal Pradesh	997	904	93
9	Jammu & Kashmir	2661	1919	742
10	Karnataka	14578	14584	-6
11	Kerala	4	4	0
12	Madhya Pradesh	21161	20920	241
13	Chhattisgarh	5007	4712	295
14	Maharasthra	15164	14738	426
15	North East-I	1918	1109	-809
16	North East-II	1536	1116	420
17	Orissa	11341	10408	933
18	Punjab	2146	2146	0

19	Rajasthan	14658	13748	910
20	Tamil Nadu	6000	6000	0
21	Uttar Pradesh (East)	27897	23876	4021
22	Uttar Pradesh (West)	10124	10334	-210
23	Uttarakhand	3149	2935	214
24	West Bengal	12096	11293	803
	Total	**186872**	**175522**	**11350**

TABLE III - VILLAGE PUBLIC TELEPHONES - DETAILS OF RCPs AS ON 31-03-2007

Sl. No.	Service Area	To be provided BSNL	RIL	Total	Achievement BSNL	RIL	Total
1	Andaman & Nicobar	0	0	0	0	0	0
2	Andhra Pradesh	3677	1865	5542	3592	1132	4724
3	Assam	1913	0	1913	1828	0	1828
4	Bihar	1302	3254	4556	1216	2489	3705
5	Jharkhand	451	0	451	414	0	414
6	Gujarat#	1829	272	2101	1650	101	1751
7	Haryana	145	626	771	88	391	479
8	Himachal Pradesh	95	0	95	36	0	36
9	Jammu & Kashmir	122	0	122	56	0	56
10	Karnataka	1528	669	2197	1528	475	2003
11	Kerala	1	0	1	1	0	1
12	Madhya Pradesh @	1759	0	1759	1730	0	1730
13	Chattisgarh@	627	0	627	625	0	625
14	Maharashtra	3140	305	3445	1707	165	1872
15	North East-I	505	0	505	200	0	200
16	North East-II	193	0	193	128	0	128
17	Orissa	936	0	936	935	0	935
18	Punjab	43	225	268	43	156	199
19	Rajasthan	1416	0	1416	1361	0	1361
20.	TN & Pondichery	1424	1769	3193	1416	1109	2525
21	Uttar Pradesh (East) $	2295	4721	7016	1736	3487	5223
22	Uttar Pradesh (West) $	344	0	344	344	0	344
23	Uttarakhand	5	3183	3188	4	2777	2781
24	West Bengal	1072	4542	5614	914	2784	3698
	Total	**24822**	**21431**	**46253**	**21552**	**15066**	**36618**

RCP figure for Gujarat Service Area was modified from 1801 to 1829 vide USOF Letter No. 30-133/2005-USF (Vol. V) dated 07.06.2006

$ RCP figure for UP(E) & UP(W) Service Areas under modification vide USOF Letter No. 30-133/2006-USF (Vol. V) dated 07.06.2006

@ RCP figure for Madhya Pradesh and Chhattisgarh Telecom Circles have been modified by BSNL in the Month of September-2006 [Earlier:M.P. (1810), CHG (576), Revised: M.P. (1759), CHG (627)]

TABLE IV - DETAILS OF RURAL DIRECT EXCHANGE LINES (RDELs) AFTER 01-04-2005

Sl. No.	Service Area	Total number of eligible SDCAs	No. of RDELs provided as on 31 March 2007				
			BSNL	RIL	TTL	TTL (MH)	Total
1	Andaman & Nicobar	-	NA	NA	NA	NA	0
2	Andhra Pradesh	117	64218	102209	NA	NA	166427
3	Assam	26	29082	NA	NA	NA	29082
4	Bihar	56	34886	2295	45034	NA	82215
5	Jharkhand	66	23639	NA	NA	NA	23639
6	Gujarat	120	68048	76674	NA	NA	144722
7	Haryana	16	NA	9410	64852	NA	74262
8	Himachal Pradesh	22	11268	23353	NA	NA	34621
9	Jammu & Kashmir	19	11398	NA	NA	NA	11398
10	Karnataka	117	67015	128288	51350	NA	256653
11	Kerala	15	-160	106486	NA	NA	106326
12	Madhya Pradesh	230	138991	28906	70114	NA	238011
13	Chhattisgarh	88	19015	NA	NA	NA	11398
14	Maharashtra	228	193317	31236	NA	209149	433702
14	North East-I	27	10375	NA	NA	NA	10375
15	North East-II	50	6577	NA	NA	NA	6577
16	Orissa	96	60821	NA	NA	NA	60821
17	Punjab	18	8242	1744	117345	NA	127331
18	Rajasthan	203	66358	31114	203925	NA	301397
19	Tamil Nadu	24	16005	115964	NA	NA	131969
20	UP (East)	84	44067	28964	139282	NA	212313
21	UP (West)	21	NA	30991	35013	NA	66004
22	Uttaranchal	29	14493	NA	NA	NA	14493
23	West Bengal	13	3651	19573	NA	NA	23224
	TOTAL	**1685**	**891306**	**737207**	**726915**	**209149**	**2564577**

Note:

The columns with value "NA" indicates that the respective service providers were not successful in these service areas and have not been awarded the work of provisioning of RDELs.

TABLE V - UNIVERSAL SERVICE OBLIGATION FUND POSITION AS ON 30-04-2007

Year	Opening Balance	Funds collected as Universal Service Fund Levy in FY	Funds collected and disbursed	Balance at the end of the Year
(Amount in crores of rupees)				
2002-03	0	1653.61	300	1353.61
2003-04	1353.61	2143.22	200	3296.83

2004-05	3296.83	3457.73	1314.59	5439.98
2005-06	5439.98	3533.29	1766.85	7206.42
2006-07	7206.41	4211.13	1500.00	9917.54
2007-08	9917.54		10.08 Crore disbursed against an allotment of 255 Crore out of 1800 Crore announced in Parliament	
Grand Total		14998.98		

TABLE VI – ACTIVITY WISE DISBURSEMENT OF USO FUND AS ON 30-04-2007

	Financial Year	Funds allotted	O & M of VPTs	Replacement of MARR VPTs	RCP	VPTs in Uncovered villages	RDELs (Prior to 1.4.02)	RDELs installed from 1.4.02 to 31.3.05	RDELs installed after 1.4.05	TOTAL
1	2002-03	**300.00**	236.63	63.37	NA	NA	NA	NA	NA	300.00
2	2003-04	**200.00**	66.40	4.60	NA	NA	129.00	NA	NA	200.00
3	2004-05	**1314.59**	65.13	72.09	NA	NA	1062.78	114.59	NA	1314.59
4	2005-06	**1766.85**	83.39	108.17	31.89	29.86	0.00	1393.44	120.1	1766.85
5	2006-07	**1500.00**	81.54	106.19	41.72	55.40	0.00	342.74	872.41	1500.00
6.	2007-08	**255.00**	0.00	0.00	0.14	0.00	0.00	0.09	9.85	10.08
	GRAND TOTAL	**5336.44**	**533.09**	**354.42**	**73.75**	**85.26**	**1191.78**	**1850.86**	**1002.36**	**5091.52**

Note:

"NA" indicates that the Agreements for the repective USO activities were not signed during this period.

TABLE VII - INFRASTRUCTURE SITES PROPOSED TO BE SET UP FOR PROVISION OF MOBILE SERVICES

Sl. No.	State	District	Towers	No. of Villages Covered by the Towers
1.	Andhra Pradesh	22	581	9081
2.	Arunachal Pradesh	12	62	936
3.	Assam	20	90	3118
4.	Bihar	37	489	23586
5.	Chhattisgarh	16	560	10929
6.	Gujarat	4	66	822
7.	Haryana	8	14	273

8.	Himachal Pradesh	11	295	5653
9.	Jammu & Kashmir	12	178	2150
10.	Jharkhand	18	305	12529
11.	Karnataka	26	427	9309
12.	Kerala	11	46	140
13.	Madhya Pradesh	45	985	24505
14.	Maharashtra	33	1017	18520
15.	Manipur	9	95	695
16.	Meghalaya	7	102	2803
17.	Mizoram	8	71	361
18.	Nagaland	7	56	474
19.	Orissa	30	432	15930
20.	Punjab	3	13	501
21.	Rajasthan	32	411	10839
22.	Sikkim	3	8	87
23.	Tamilnadu	27	371	6430
24.	Tripura	4	147	655
25.	Uttar Pradesh	66	666	34767
26.	Uttrakhand	13	217	8086
27.	West Bengal	16	167	9125
	Countrywide Totals	**500**	**7871**	**212304**

BASIC/UNIFIED ACCESS SERVICES

Based on the recommendations of Telecom Reglatory Authority of India (TRAI), the Government announced guidelines on 25th January 2001 for issue of licences, with unrestricted open entry, to new Basic Service Operators in all the Service areas including the six service areas where private licences already existed. Now, there are only two Basic Service Providers i.e. BSNL & MTNL. All the Private Operators who were providing Basic Services had migrated to Unified Access Service License regime as per DOT guidelines dated 11.11.2003 for migration to Unified Access (Basic & Cellular) Service consequent to Addendum to the NTP-1999.

The Indian Telegraph Act, 1885 was amended in January 2004 to establish USO Fund with retrospective effect from 01.04.2002.

INTRODUCTION OF UNIFIED ACCESS SERVICES LICENCES

On 11.11.2003 Govt. announced granting of Unified Access Services Licences which permitted the licensee to provide basic and/or cellular services using any technology in a defined service area. Presently, there are 96* UASL licences.

*includes licences migrated from Cellular Mobile Telephone Service (CMTS) and Basic Services.

NATIONAL LONG DISTANCE SERVICE

National Long Distance (NLD) service was opened to the private sector w.e.f. 13 August 2000. Indian registered companies having a net worth of Rs. 2.5 crore and paid up equity of Rs. 2.5 crore are eligible to apply. The total foreign equity in the applicant comany must not exceed 74 per cent at any time during the entire licence period. Investment in the eqity of the applicant company by an NRI/OCB/ International funding agencies is counted towards its foreign equity. The entry fee of Rs. 2.5 crore is to be submitted before signing The licence agreement. There is no restriction on number of operators. An NLD operator can carry inter-circle traffic in the country. The licence for NLDO is issued on non-exclusive basis, for a period of 20 years and is extendable by 10 years at one time. In addition to Bharat Sanchar Nigam Ltd (BSNL) 18 more companies have signed licence agreement for National Long Distance Service. The competition resulted in lowering of tariff.

INTERNATIONAL LONG DISTANCE SERVICE

The International Long Distance (ILD) service is basically a network carriage service, providing International connectivity to the network operated by foreign carriers. In accordance with theNew Telecom Policy-1999, the Government opened the International Long Distance Service from 1st April 2002 to the private operators. There is no restriction on the number of operators. The Indian registered companies having a net worth of Rs. 2.5 crore are eligible to apply. The total foreign equity in the applicant company must not exceed 74 per cent at any time during the entire licence period. Investment in the equity of the applicant company by an NRI/OCB/ International funding agencies is counted towards its foreign equity. The entry fee of Rs. 2.5 crore is to be submitted before signing licence agreement along with Performance Bank Guarantee of Rs. 2.5 crore. The licence is valid for 20 years from the date of licence agreement. So far 13 companies have signed licence agreement for International Long Distance service.

INFRASTRUCTURE PROVIDER CATEGORY - II (IP-II)

IP-II licence was opened on 13.08.2000 and six companies got IP-II licence. However, with effect from 10.11.2005 IP-II category licence has been done away with and the licensees have been given option tomigrate to NLD Licence. So far two IP-II licensees have migrated to NLD service licence.

INFRASTRUCTURE PROVIDER CATEGORY-I (IP-I)

The applicant company for IP-I requires registration only with DoT. Companies registered as IP-I can provide assets such as dark fibre, right of way, dust space and tower. All Indian Registered companies are eligible to apply. There is no restriction of foreign equity and number of entrants. There is no entry fee and bank guarantee. The applicant company is required to pay Rs. 5,000 as processing fee along with the application. So far 174 companies have been registered as Infrastructure provider Category-I.

CELLULAR SERVICES

The country is divided into 19 (Ninteen) Telecom Circles Service areas and 4 (Four) Metro Service areas for the Cellular Mobile Telephone Service (CMTS) as well as Unified Access Services (UAS). The Chennai Metro and Tamil Nadu telecom Circle Service Areas have been merged for the new licences w.e.f. 15th September 2005. There are 5-8 access service providers in each service area. At present there are over

185.13 million (as on 30.06.2007) cellular subscribers and are growing at the rate of six to eight million per month. Presently, there are 60* CMTS licences. The Licence fee, which is in the form of revenue share, is 6 per cent/8 per cent/10 percent of the adjusted gross revenue, depending on the area of their operation.

VOICE MAIL/AUDIOTEX/UNIFIED MESSAGING SERVICE

New policy for Voice Mail/Audiotex Service, in terms of NTP-1999 was announced in July 2001 by incorporating a new service, namely, Unified Messaging Service (UMS) is a system by with voice mails, fax and e-mails (all three) can be received from one mail box using telephone instrument, fax machine, mobile phones, internet browsers etc. Presently, eleven companies have 17 licences to provide these services in eight cities. There is no licence fee for providing Voice Mail/Audiotex Service.

POLICY FOR PUBLIC MOBILE RADIO TRUNK SERVICE

Policy for Public Mobile Radio Trunk Service (PMRTS) in terms of NTP-1999 was announced on 1 November 2001. PSTN connectivity is also permitted to PMRTS service. Presently 14 companies are granted 38 licences to provide these services in 3 Metros & 7 Circles. The Licence fee, which is in the form of revenue share, is 5 per cent of the adjusted gross revenue.

GLOBAL MOBILE PERSONAL COMMUNICATION BY SATELLITE

(GMPCS) service in terms of NTP-1999 was announced on 2 November 2001. Detailed information about these services is availableon the websites of the department. As on date, there is no licensee to provide this service in India. The Licence fee, which is in the form of revenue share, is 10 per cent of the adjusted gross revenue and entry fee is 1 crore.

OTHER SERVICE PROVIDERS

Services like Tele-education, tele-medicine, Tele-banking, call Centre, etc, as defined in NTP-1999 are covered under other Service Providers (OSPs). There is no licence fee and only registration is required for providing these Services. Call Centres/Business Process Outsourcing (BPOs) are permitted with Internet and IPLC connectivity on the same Local Area Network (LAN). Interconnectivity of call centers of the same group of companies is also permitted for redundancy and load balancing. Recently use of Internet telephony (Restricted) has also been permitted for Other Service Providers. Also a company having 50 seat call center, is permitted to share the common infrastructure between their domestic and international call center at a location.

So far, over 1950 cases have been registered under OSP category. Indian ITES-BPO exports have grown to USD 6.3 billion in FY 2005-06, recording a growth of 37 per cent. It is expected to grow to USD 8-8.5 billion in FY 2006-07. Net employment in the ITES-BPO segment has grown by approximately 100,000 in FY 2005-06, taking the total direct employment within this segment to 415,000.

Registration under OSP Category & Telemarketing Category has been decentralized from Registration under OSP Category & Telemarketing Category has been decentralized from DOT HQ to field units of VTM cells in 10 circles (i.e. Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Delhi, haryana, Gujarat, Kolkata, Chennai & Mumbai) w.e.f 01.09.2007

TRAINING INFRASTRUCTURE

Bharat Sanchar Nigam has an elaborate Training set up of 42 Training centres which includes 3 (Three) Apex level Taraining centres Viz Advance level Training Centre (ALTTC) at Ghaziabad, Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training (BRBRAITT) at Jabalpur, National Academy of Telecom Finance and Management (NATFM) at Hyderabad & 39 other Telecom Training centres at Regional, Circle and District levels. These Training centres cater to the training needs of all BSNL employees i.e. executives & non-executives in Various disciplines viz. Telecommunication Technology, Management, Computer, Finance, Building Science etc.

ALTTC, Ghaziabad established by the Government of India in 1975 with the assistance of United Nations Development Programme (UNDP) and International Telecommunications Union (ITU) is one of the leading telecom training centre of Regional, Circle and District levels. These Training centres cater to the training needs of all BSNL employees ie. executives & non-executives in various disciplines viz. Telecommunication Technology, Management, Computer, Finance, Building Science etc.

ALTTC, Ghaziabad established by the Government of India in 1975 with the assistance of United Nations Development Programme (UNDP) and International Telecommunications Union (ITU) is one of the leading telecom training centre of Asia and caters to training needs of BSNL and telecom Administration of member countries of ESCAP and APT. The centre develops and imparts for the Base, Middle and Top level Telecom engineers and Managers. It functions as resource centre in providing developed course materials, audio visual instructional aids, computer based training, software etc. The centre also provides training to trainers. ALTTC, Ghaziabad is an ISO 9001-2000 certified institute.

BRBRAITT, Jabalpur is another premier institute of BSNL providing high quality training in Telecommunication and Information Technology. It is also ISO 9001-2000 certified for quality teaching. Other training centres fall into a hierachical set up of Regional, Circle & District levels of Training. The list of training centres in all these levels is enclosed at annexure-1.

While ISO certification is available for BRBRAITT Jabalpur, ALTTC Ghaziabad, RTTC Thiruvananthpuram, RTTC Mysore, RTTC Hyderabad, RTTC Kalyani & CTTC Chennai, other training centres are also attempting to certify themselves to ISO standards.

In order to have a centralized facilitation and monitoring of the overall training activities of BSNL, across the country, computerization of these activities have been done through launch of CTMS (Computerised Training Management System) package. A network of training co-ordinators has been put inplace covering all the SSA units so as to effectively handle the 'Training plants' for each of the units, attempting to make the training "need based" and "relevant". With the fast changing technological scenario, BSNL is regularly reviewing its training infra structure to meet the competitive demands of the sector.

In addition to above, a bottom-up approach of training through ''Staff Empowerment Initiative'' has been launched to encourage the staff to directly project their own vision of skill upgradation.

LIST OF TRAINING CENTRES UNDER BSNL

APEX LEVEL

1. ALTTC, GHAZIABAD
2. BRBRAITT, JABALPUR
3. NATFM, HYDERABAD

REGIONAL TELECOM TRAINING CENTRES

S. NO.	TRAINING CENTRE	S. NO.	TRAINING CENTRE
1	AHMEDBAD	9	MYSORE
2	BHUBANESHWAR	10	NAGPUR
3	CHENNAI	11	RANCHI
4	GUWAHATI	12	PUNE
5	HYDERABAD	13	RAJPURA
6	JAIPUR	14	THIRUVANANTHAPURAM
7	KALYANI		
8	LUCKNOW		

CIRCLE TELECOM TRAINING CENTRES

S. NO.	TRAINING CENTRE	S. NO.	TRAINING CENTRE
1	AHMEDABAD	11	LUCKNOW
2	INDORE	12	MYSORE
3	BHUBANESHWAR	13	MEERUT
4	KOLKATA	14	NASIK
5	CHENNAI	15	PATNA
6	GUWAHATI	16	RAJPURA
7	JAIPUR	17	SHILLONG
8	JAMMU	18	SUNDERNAGAR (HP)
9	KAKINADA	19	THIRUVANANTHAPURAM
10	KURUKSHETRA		

DISTRICT TELECOM TRAINING CENTRES

S. NO.	TRAINING CENTRE	S NO.	TRAINING CENTRE
1	AHMEDABAD	5	HYDERABAD
2	BANGALORE	6	PUNE
3	KOLKATA		
4	CHENNAI		

TELECOMMUNICATION ENGINEERING CENTRE

1. Introduction

Telecommunication Engineering Centre (TEC) is Technical Wing of DoT provides technical advice to DoT, prepares telecom standards and certifies telecom products for manufacturers & service providers. Its mission is to produce National Standards, Specifications and other technical documents for the deployment of telecom products and services in India. TEC's standards and specifications are closely aligned with market needs and are prepared by the participation of all stakeholders (service providers and manufacturers) and subject experts from prestigious educational institutions like IITs. There iswide acceptance of the products and services certified by TEC in India and abroad.

The Roles and activities of TEC are as below:

- Preparation of standards and specifications for growth and seamless interworking between different networks of service providers.
- Initiative and aggressive action for deploying NGN (Next generation Network) in India and set up world-class NGN test-bed. A Focus Group within TEC isworking on the study of NGN that could help various stakeholders and users to understand the subject in the larger national and global context.
- National Focus Group on NGN comprising of all stakeholders is being driven by TEC.
- Fast-track rollout of broadband in the country especially in rural areas by using Wi-Max and PON technologies.
- Certification and approval of equipments and services for different manufacturer's and service providers.
- Republic of India and Republic of Singapore have entered into Comprehensive Economic Cooperation Agreement (CECA), accordingly both the parties have agreed on "Mutual Designation Agreement (MRA) in telecom Sector. TEC is nominated as the Designating Authority (DA) for India.
- Setting up of Conformance Assessment Bodies (CAB) for testing and certification of telecom products for use in India, S.E. Asia and SAARC countries.
- Technical support to DoT and technical advice to TRAI and TDSAT.
- Drawing up Fundamental Technical Plans of DoT.
- Coordination with "National Technology Think-Tank" for the development of the entire Telecom eco-system in India.
- Drawing up of National Disaster Relief and Security Control for Telecom networks.
- Encouraging R&D in telecom by participation of public and private telecom sectors and educational institutions tomake India R&D hub in the field of telecommunications.
- Certification topromote indigenisation and manufacturing take - off in India. Active co-operation with C-DOT to develop Telecom Technologies aimed specifically for rural areas.
- International cooperation in matters connected with telecommunications including matters relating to all international bodies dealing with telecommunications such as International Telecommunication Union (ITU), its

Radio Regulation Board (RRB), Radio Communication Sector (ITU-R), Telecommunication Standardization Sector (ITU-T), Development Sector (ITU-D), International Telecommunication Satellite Organization (INTELSAT), International Mobile Satellite Organization (INMARSAT), Intersputnik (International Intergovernmental Space Organisation), Asia Pacific Telecommunication (APT).

2. TEC has following technical specialised groups :

- Information Technology (Data and applications, IPv6 Test bed)
- Switching (New technology switches and Next Generation network (NGN)
- Mobile Communication (2G, 3G/WCDMA, CDMA 2000 1X, Wi-Max)
- Value Aided Services (for wireline and wireless networks)
- Network terminals and devices
- Transmission (terrestrial, OFC, GPON, EPON, outdoor Plant)
- Radio and Satellite Transmission

3. Standardisation

Standardization is an essential requirement for the open exchange of information between equipment and networks. No network can work without standards. TEC prime objective isto support global harmonisation by preparing standards in which all the major stakeholders contribute actively.

TEC evolves generic, interface, service requirements and specifications for various telecomproducts, equipments and services for all the service providers for seamless interworking of different networks of various service providers.

4. Tests and Approvals

TEC tests and approves various telecom products for evaluation of technology and their interconnection in the network, and for service quality testing of licensed service providers.

5. Technical Support

TEC provides support and advice on various technical issues to DoT, for formulating fundamental plans, technology plans, technology plans, technology evaluations etc.

6. Publications

TEC publishes following documents:

- Generic Requirements (GR),
- Interface Requirements (IT)
- Standard Requirements (SD)
- Service Requirements (SR)
- Approval Procedure Documents
- Technology White Papers
- TEC Newsletter: Contains technical articles and highlights TEC Activities
- Compendium on Next Generation Network (under publication)

TEC has launched new website www.tec.gov.in and most of the information has been made available on TEC website.

CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DOT)

Centre for Development of Telematics (C-DOT) is the Telecom Research and Development Centre of the Government of India. C-DOT develops total telecom solutions, technologies and applications for the fixed-line, mobile and packet-based converged networks and services. C-DOT's current focus is on projects for defense and security agencies, developing systems for packet based next generation networks including migration solutions. C-DOT is also giving importance tosoftware intensive products and solutions including turnkey and develop, build and operate model projects. Projects to cater to other national requirements to bridge the digital divide and those for North Eastern region and to develop enterprise and broadband solutions are also part of the schemes.

C-DOT's product portfolio includes Advanced Intelligent Network solutions, Access Network products, Wavelength Division Multiplexing (WDM) systems, Satellite Communication systems, Network Management Systems, Operation Support Systems, Cell and Packet technologies for voice & data communications and RuralWireless Access and Broadband Solutions based on software defined and Cognitive Radio. C-DOT continues upgrade the legacy systems deployed in the field.

C-DOT has chosen various models of cooperation with different partners to pool strength and get closer to the market. The project partnership, co-branding, value addition and adaptation are some of the new strategies besides its earlier methodology of technology transfer adoptedfor fixed line switching products. During the 11th Five Year Plan C-DOT is expected to lay greater focus on programmes of national interest.

WIRELESS PLANNING AND COORDINATION WING

Wireless Planning and Coordination (WPC) Wing, established in 1952, is the national radio regulatory authority responsible for coordination and regulation of radio spectrum usages in the country. It is a nodal agency for all matters concerning International Telecommunication Union (ITU), a specialized agency of the United Nations for all telecommunication matters and Asia Pacific Telecommunity (APT), an inter-governmental organization of the region, WPC assisted by its Monitoring Organisation performs all functions related to planning, coordination, assignment, regulation and administration of the usage of the radio frequencies in India, clears site for installation of wireless stations and issues licenses for establishment, maintenance and working of wireless stations in India under the Indian Telegraph Act, 1885.

It is responsible for all matters concerning assignment of frequencies for all terrestrial, Geo-stationary Satellite Orbit (GSO) and Non-GSO based satellite networks, includingpositions in GSO and necessary coordination in this regard both at national and international levels. It also conduct examinations for award of certificate of proficiency for aeronautical and maritme mobile services and for radio amateurs. The decision of Government of India to make available basic mobile as well as value added services, FM Radio & Satellite TV/DTH by the private service providers, increase of broadcast coverage as well as Information Technology Sector with the liberalization of economy, has resulted in a very large increase in demand on the radio spectrum and orbit resources, which are limited natural resources.

''The trend of modern telecommunication is towards increased mobility with higher data speeds. Mobile communications are possible through wireless only. This

FDI POLICY FOR THE TELECOM IS AS UNDER

Sr.	Sector/Activity	FDI Cap/Equity	Entry route	Other Conditions	Relevant Press Note
1.	Basic and cellular, Unified Access Services, National/International Long Distance, V- Sat, Public Mobile Radio Trunked Services (PMRTS) Global Mobile Personal Communications Services (GMPCS) and other value added telecom services	74% (including FDI, FII, NRI, FCCBs, ADRs, GDRs, convertible preference shares, and proportionate foreign equity in Indian promoters/ Investing Company)	Automatic upto 49%.	Subject to guidelines notified in the Press Note No. 3 (2007 Series)	PN 3/2007
			FIPB beyond 49%		
2.	ISP with gateways, radio-paging, end-to-end bandwidth.	74%	Automatic upto 49%	Subject to licensing and security requirements notified by the Department of Telecommunications.	PN 4/2001
			FIPB beyond 49%		
3.	a) ISP without gateway,	100%	Automatic upto 49%	Subject to the condition that such companies shall divest 26% of their equity in favour of Indian public in 5 years, if these companies are listed in other parts of the world. Also subject to licensing and security requirements, where required.	PN 9/ 2000 and PN 2/2007
	b) provider providing dark fibre, right of way, duct space, tower (Category-I);	Infrastructure	FIPB beyond 49%		
	c) Electronic mail and voice mail				
4.	Manufacture of telecom equipments	100%	Automatic	Subject to sectoral requirements.	PN 2/ 2000

has placed greater demands on the already scarce resource of RF spectrum. The mobile services have brought about a revolution in theIndian telecom sector, besides immense socio-economic benefits. The WPC Wing is trying to meet the challenge and provide essential spectrum for new services/technologies through spectrum refarming etc.

WIRELESS PLANNING FINANCE

The amounts collected by the department on account of spectrum charges (including license fee for possession of wireless equipment) during the three financial years are as under:

Year	Amount (Rs in crore)
2004-05	1028
2005-06	1412
2006-07	2088 (provisional)

ACTUAL INFLOW (YEAR-WISE) OF FDI IN TELECOM SECTOR FROM AUGUST 1991 TO MARCH, 2007

(Rs. in crore)

Year	FDI INFLOW	Year	FDI INFLOW
Till 1993	2.06	2000	288.58
1994	14.02	2001	3,970.90
1995	206.74	2002	1,081.50
1996	764.83	2003	301.40
1997	1,245.19	2004	454.85
1998	1,775.64	2005	94.31
1999	212.67	2006	1404.48
		2007 (March)	0.74
		TOTAL	11817.78

ACTUAL INFLOW (SECTOR WISE) OF FDI IN TELECOM SECTOR FROM AUGUST 1991 TO MARCH, 2007

(Rs. in crore)

Sl. No.	SERVICE/ITEM	FDI
1.	Basic Telephone Service	393.7
2.	Cellular Mobile Telephone Service	3107.56
3.	Radio Paging Service	91.0
4.	E-Mail Service	68.8
5.	VSAT Service	28.1
6.	Cable TV Network + Internet	172.2
7.	Satellite Telephone service	48.1
8.	Radio Trunking Service	7.1

9.	Manufacturing & Consultancy	1619.1
10.	Holding Companies	4842.0
11.	Other Value Added Services	23.06
12.	Automatic Route	1417.06
	TOTAL	**11817.78**

PUBLIC SECTOR UNDERTAKING

Bharat Sanchar Nigam Ltd.

Bharat Sanchar Nigam Ltd. (BSNL) came into existence on 1st October, 2000 by corporatisation of erstwhile Department of Telecom Services/Telecom operation to upgrade the quality of service, expand the telecom network, introduce new services, provide telecom service in all village and build customer's confidence. BSNL operates the telecom services all over the country except Mumbai and Delhi. BSNL is a 100% Govt. of India owned PSU with an authorized capital of Rs. 17500 crores a paid up capital of Rs. 12,500 crores. Its net worth as on 31.03.07 is Rs. 86,600 crores (Provisional - unaudited) with staff strength of approximately 3.21 lakh. It is one of the largest Public Sector Undertakings in India with a customer base of 6.47 crore as on 31.03.07

The company has also been in the forefront of technology with 100% digitized switching network in the country. The vast switching network has a capacity of 7.97 crore lines with 8,605 exchanges in urban areas and 29,203 exchanges in rural areas as on 31.03.07. BSNL's nationwide network covers all district headquarters, subdivisional headquarters, tehsil headquarters and almost all the block headquarters. Out of 6.07 lakh villages in the country, 5.53 lakh villages have already been provided telephone facility by BSNL has also provided 1.55 crore telephone connections in rural areas. BSNL is the largest Telecom Providers in India having over 32% of market share.

BSNL is providing a number of telecom services i.e. Internet Services, Leased Line Circuits, telegraph Services, Intelligent Network (IN) and Integrated Services Digital Network (ISDN) in addition to basic telephone service, Cellular Mobile Telephone services & WLL services.

BSNL also provides Web hosting, Web co-location, Dial VPN, VPN over Broadband and Games on demand Services. IPTV and Video on demand Services have been launched in Pune and shall be progressively launched in other cities.

BSNL has launched its broadband services in March 2005. Broadband services have been made available in 890 cities and are proposed to be extended to 1500 cities by 2007 end. As part of the NeGP (National e-Governance Policy). Broadband is planned in 20,000 rural exchanges, deployment of which is expected to start towards the end ofthe year 2007. With this, 85% of BSNL exchanges will be Broadband enabled.

BSNL has also started a unique service for the remote areas, called Gramin sanchar Sewak Scheme in which telephones are taken to the doorsteps ofthe poorest of the poor so that they can also avail of the telephone facilities. This service is most popular in remote areas of the country.

BSNL is going to deploy IP based TAX, Wi-Max, Wi-Fi, NGN network with soft switches & IP based transport architecture & Unifited I.P. Backbone network delivering triple play servies. Presently in 100 cities IP MPLS network isworking.

Mahanagar Telephone Nigam Ltd.

1. The Mahanagar Telephone Nigam Limited (MTNL) came into existence on 1 April 1986 as a company wholly-owned by the Government under the Department of Telecommunication, Ministry of Communications. MTNL is entrusted with the management, control and operation of telecom services (excluding public telegraph service) in metropolitan limits of Mumbai & New Mumbai (including Kalyan, and Thane for mobile service) and Delhi (including four towns Noida, Gurgaon, Faridabad & Ghaziabad for mobile service).
2. MTNL is among the few PSU's listed on New York Stock Exchange (NYSE).
3. The authorized equity share capital of MTNL is Rs. 800 crores, the paid up capital is Rs. 630 crores. The Government now owns about 56.25 percent of MTNL paid up capital.
4. The last decade and a half has been an eventful period in the existence of MTNL. There has been all-round development and growth and improved operational efficiency.
5. MTNL provides a host of telecom services that include fixed telephone service, GSM based Mobile service, CDMA based Wireless in Local Loop and limited mobile, Internet Broadband on ADSL 2+ technology and Leased Line services.
6. The network of MTNL is now fullydigital. As on 31 July 2007 the total no. of telephone exchanges in MTNL are 338 and 202 in Delhi and Mumbai respectively. The total Switching capacity is 9.11 million and the subsoriber's base is 6.54 milliion including fixed lines, WLL (CDMA) and GSM.
7. MTNL started GSM based cellular mobile telephone service in February 2001 both in Delhi and Mumbai under the brandname 'DOLPHIN'. The prepaid cellular services under the brand name 'Trump' was introduced in 2002. There has been tremendous growth in GSM subscriber's base of MTNL in the last two years. During 2006-07, MTNL has added nearly 8.06 lakh GSM subscribers. As on July 31, 2007 MTNL had installed a cellular network with a capacity of 10.25 lakh lines in Delhi and 13.25 lakh lines in Mumbai. this year MTNL has decided a tender for further adding 20 lakh lines of GSM based on 2G/3G each in Mumbai and Delhi. In phase - IPO for 750K 2G lines each in Delhi and Mumbai has been placed.
8. MTNL has launched CDMA based limited mobility service in the cities Delhi and Mumbai during the year 2001-02 with the brand name 'GARUDA' and presently have a total of 1,31,979 subscribers with an installed capacity of 10.98,230 most of which are based on more advanced CDMA 2000 1X technology.
9. MTNL has launched broadband services using ADSL 2+in January 2005 and expects to experience significant demand for these high speed data services from large corporate, financial, media, public service and educational institutions. The broadband sustomer base as on July 31, 2007 is 5.08 lakh and the installed capacity of broadband ports is 4.58 lakh. MTNL has plans to install additional 8 lakh broadband ports in fiscal 2007-08. Along with this MTNL is also providing Internet service in both Delhi and Mumbai and had approximately 1.32 million Internet subscribers at the end of July 2007.

10. MTNL has launched IPTV services in both Delhi and Mumbai on revenue sharing basis to the landling subscribers on the broadband connections.
11. MTNL has commissioned a state of art IP-MPLS Core in its network and shall commission the same in Mumbai shortly so as to give MPLS enabled services with better quality of service to its esteemed customers. This MPLS core network will also aggregate all the next generation network voice, data broadband and video traffic so as to enable MTNL to have an efficient utilization of its bandwidth.
12. MTNL is also planning to introduce DWDM technology to further increase the capacity of its optical fiber in network.
13. MTNL has also floated an EOI for introduction of Wi-Max, Mean while pilot projects have been started in both Delhi and Mumbai for providing Wi Max services.
14. A state of the art convergent billing and CRM system is under installation. This will facilitate CDR based billing single bill for all services to the subscribers, flexibility in billing and innovative traiff packages for subscribers and thus will help in reducing billing complaints.
15. MTNl has also placed an APO to add 24K tandem capacity based on NGN - next generation network, in Delhi & Mumbai each which will replace/upgrade the existing landline network and will provide a lot of services form a single network based on IP in line with the emerging trends.
16. In addition to the telephone service, MTNL is providing a variety of services:

- Phone plus services such as computerized morning alarm, voice mail, call forwarding, call waiting etc.
- Public call offices, which consist of both manned offices and coin operated telephone booths where people can make local,long distance and international calls.
- Value added Services such as call-waiting, call forwarding, wake-up calls, absent subscriber service (informing callers that the subscriber is unavailable), caller identification, friends & family, night talk, VMS call conference, WAP and voice mail, News, Gaming, and cricket information in line with the emerging trends in both PSTN/Mobile network.
- Internet based services like E-mail, Internet telephony, web hosting, web surfing etc.
- Narrow-band ISDN services that allow subscribers to send high speed date make telephone calls with high quality voice transmission and hold desktop video conferences over a single line.
- Leased line services for lical, domestic, long distance and international connectivity. Subscribers can use our leased lines to assemble their own private networks between offices within Delhi and Mumbai or together with BSNL, between Delhi and Mumbai and to other Indian cities.
- IN based services which include calling card services both virtual calling card and account calling card, a toll-free service, a premium rate ''0900'' number service, universal access service, televoting service etc.
- Wi-fi service to provide internet connectivity to inaccessible and hot spots in Delhi area.

17. MTNL is also taking care of its customers with the measures like:

- easy payment of telephone bills through on line payment, ECS, Master Card at selected petrol pumps, automatic teller machines, easy bill centers etc.
- launching of various CRM services such as automatic rent rebate, charge, changed number announcement service, customer service management system, etc.
- Call centre/help lines for the customers to book their grievances.
- By revising tariffs from time to time to suite all segments of society.
- MTNL is having Sanchar Haats at Delhi and Customer Service Centers (CSCs) at Mumbai, where customer can get various services like registration for new service, duplicate bills of cellular connection, bill payment, VCC cards etc.

18. MTNL & STPI have joined hands for setting up data centre for Web-farming application through a newly opened company MTNL-STPI ltd. With 50-50% equity participation. It isproposed to provide exclusive Data center services, Messaging services, Business application services to the identified sectors of economic activity and thereby also popularizing the in domain in the networked community across the world.

19 MTNL & BSNL with 51& 49% equity participation intend to lay submarine cable from both East and West coast of India to South-East Asia & Middle East with an ultimate intent to extend it to Europe & USA.

20. MTNL is keen in expanding its overseas operations and currently is in the process of exploring the potential in a few Asian and African countries. United Telecom Limited (UTL), a joint venture involving MTNL, TCIL, VSNL and Nepal Ventures Private Limited commenced wireless in local loop services as the first private-sector telecommunications operator in Nepal. MTNL has also been awarded licenses to provide basic and international long distance service as well as mobile services in Mauritius. Through a 100% subsideiary in Mauritius by the name of Mahanagar Telephone Mauritius Limited (MTML), MTNL has begun to offer ILD services, fixed wireless services and mobile services.

Revival of ITI - Measures taken by Department of Telecom

M/s ITILimited, a Public Sector Undertaking under Department of Telecommunications has six manufacturing units at Bangalore, Rae Bareli, Naini, Mankapur, Srinagar and Palakkad. They manufacture a range of telecom related equipments. The company is incurring losses continuously but is in revival path because of serious efforts put in by the Government. 30% reservation quota from BSNL/MTNL is given to ITI. Exemption from provision of bid security and performance bank guarantee is also been given by BSNL/MTNL.

The emphasis of the revival plan is to upgrade manufacturing facility of ITI, technology acquisitions of relevant telecom products, reorient companies business towards turnkey solutions and reduce the fixed expenditure by offering VRS to the surplus employees.

The major handicap faced by the company is its high overhead cost by way of around 2,698 surplus manpower out of a total of 13,415 (as on 31.3.2007). though the revival plan envisages reducing the surplus manpower by way of Voluntary Retirement Scheme (VRS), it is alsoworking on training and re-deployment to handle latest technology and turnkey solutions.

Telecommunications Consultants India Limited

The Telecommunications Consultants India Limited (TCIL) set up in 1978 is now a multidisciplinary telecom organization which provides complete telecom solutions from concept to completion. The core competence of the company is in turnkey execution of Communication Network projects, i.e. backbone and access as also IT Networks, for basic, GSM, CDMA, Microwave, Satellite, Radio Trunking, and other captive networks besides Switching & Transmission, Rural Communications, e-Governance, e-Education, Tele-medicine etc. The company has formed a joint venture in Rajasthan for operation of GSM services in that State and other joint venture in Nepal for operation of CDMA based WLL communication services in that country.

TCIL has executed/is executing projects in 60 countries in the Middle East, South East Asia, Africa, Europe and Central Asia. Starting with a seed equity of Rs. 30 lakh, the company though 5 issues of bonus shares has equity of Rs. 28.80 crore as on date. The company achieved a turnover of Rs. 485 crore during the year 2005-06 and has a net worth of about Rs. 400 crore.

TCIL has also been awarded recently the prestigious Pan African Project, which is aimed to provide network connectivity to 53 countries in the African Region.

Internet

As on 30th September 2007 there are 372 Licenses for provision of Internet Services out of which 123 have signed Licenses for Provision of Internet Service (Including Internet Telephony). Based on reports received from Internet Service Providers till March-07 there are approximately 9.2 million Internet subscribers in the India.

Very Small Aperture Terminals (VSATs):

In total 33 companies/organizations have been issued licenses for setting up and operating captive VSAT network via InSAT Satellite System for their Closed User Group (CUG) Communication. In addition, 11 commercial VSAT licensees are operating commercial VSAT service who are permitted to offer VSAT services to number of CUGs by having shared Hub infrastructure. Over 75,000 VSATs and 350 Earth stations are operational in India. FDI increased from 49% to 74%.

9 Defence

INDIA shares land borders with seven countries-including Bangladesh (4096 kms), China (3439 kms), Pakistan (3325 kms) and Myanmar (1643 kms)-and maritime borders with five countries. Given the size of the country and its role in the comity of nations, our security concerns and interests are not limited to our immediate neighbourhood. India's area of security interest clearly extends beyond the confines of the conventional geographical definition of South Asia.

With geo-economics gaining precedence over geopolitics, the tasking of defence forces the world over, is undergoing a sea change. Our Armed Forces are now playing a pivotal role in creating stable conditions for the nation's economic development. With its economy growing at over 8% per annum last year and set to rise further, India's one billion people are increasingly becoming an engine of regional and global growth and prosperity. Software, manufacturing, agriculture, nuclear energy, space, disaster management, maritime affairs, entertainment and culture are only some of the areas in which India's role is becoming increasingly vital for the region and the world. With the steady growth of the Indian economy, India has now a significant stake in a stable world.

India is fully committed to maintaining peace and stability with its neighbours, in the region and in the global context too. This is sought to be achieved through a combination of defence preparedness, unilateral restraint, confidence building dialogue, and expanding bilateral and multilateral interaction. Effective diplomacy, backed by credible military power is India's preferred means to meet the multiple threats and growing challenges in the region and globally. The country's force postures remain defensive in orientation, while its nuclear policy is characterised by a commitment to no-first-use, moratorium on nuclear testing, minimum credible nuclear deterrent and rejection of entering into an arms race. India is fully committed to the twin policies of no territorial ambition, and no export of ideology.

In tune with its philosophy of maintaining and strengthening defence relationships with international partners as part of India's contribution to global peace, security and strategic stability, the Ministry of Defence has significantly stepped up its defence ties with a wide range of countries across the globe. Strategic defence dialogue has assumed a significant role in the defence partnership between India and a number of countries. Such exchanges have led to greater joint partnership towards preparations for a globally coordinated initiative to fight against the menace of terrorism, proliferation, trafficking, piracy and the nefarious activities of non-state actors. India's commitment to UN-led peacekeeping operations is unwavering and India has expanded its role by agreeing to contribute troops towards the UN operations in the middle-east.

This Supreme command of the Armed Forces vests in the President of India. The responsibility for national defence, however, rests with the Cabinet. The Defence Minister (Raksha Mantri) is responsible to Parliament for all matters concerning defence of the country. Administrative and operational control of the armed forces is exercised by the Ministry of Defence and the three Service Headquarters.

ORGANISATION

The principal task of the Ministry of Defence is to obtain policy directions of the Government on all defence and security related matters and communicate them for implementation to the Service Headquarters, Inter-Service Organisations, Production Establishments and Research and Development Organisations. It is also required to ensure effective implementation of the Government's policy directions and the execution of approved programmes within the allocated resources.

The principal functions of the Departments are as follows :

(i) The Department of Defence deals with Integrated Defence Staff (IDS) and three Services and various Inter-Service Organisations. It is also responsible for the Defence Budget, establishment matters, defence policy, matters relating to Parliament, defence cooperation with foreign countries and coordination of all activities.

(ii) The Department of Defence Production is headed by a Secretary and deals with matters pertaining to defence production, indigenisation of imported stores, equipment and spares, planning and control of departmental production units of the Ordnance Factory Board and Defence Public Sector Undertakings (DPSUs).

(iii) The Department of Defence Research and Development is headed by a Secretary, who is also the Scientific Adviser to the Raksha Mantri. Its function is to advise the Government on scientific aspects of military equipment and logistics and the formulation of research, design and development plans for equipment used by the Services.

(iv) The Department of Ex-Servicemen Welfare is headed by an Additional Secretary and deals with all resettlement, welfare and pensionary matters of Ex-Servicemen.

The three Services Headquarters, viz., the Army Headquarters, the Naval Headquarters and the Air Headquarters function under the Chief of the Army Staff (COAS), the Chief of the Naval Staff (CNS) and the Chief of the Air Staff (CAS) respectively. They are assisted by their Principal Staff Officers (PSOs). The Inter-Services Organisations, under the Department of Defence are responsible for carrying out tasks related to common needs of the three Services such as medical care, public relations and personnel management of civilian staff in the Defence Headquarters.

A number of Committees dealing with defence related activities assist the Raksha Mantri. The Chiefs of Staff Committee is a forum for the Service Chiefs to discuss matters having a bearing on the activities of the Services and to advise the Ministry. The position of Chairman of the Chiefs of Staff Committee devolves on the longest serving Chief of Staff, and consequently rotates amongst the three Services.

Finance Division in the Ministry of Defence, deals with all matters having a financial implication. This Divisionis headed by Financial Advisor (Defence Services) and is fully integrated with the Ministry of Defence and performs an advisory role.

ARMY

The primary responsibility of the Army is to defend the country against external aggression and to safeguard territorial integrity of the nation. In the prevalent geo-

political, social and strategic environment the task of the Army has become enormous.

The contours of India's security challenges are numerous and varied. To the military complexities arising out of the problems of unsettled borders, the challenges of the proxy war in Jammu and Kashmir, the insurgency in the North East and the growing naxal menance in Central India, we can now add the ever enlarging spectre of terrorism and numerous non-military threats to our security. The Armed Forces are constantly reviewing preparedness to meet these challenges.

The Indian Army is equipped with requisite modern technology and equipment to enhance its combat capabilities. The focus of modernization has been on capability for Network Centre Warfare, Nuclear, Biological & Chemical (NBC) protection, increased mobility, improvement in fire power, enhanced surveillance capability and night fighting capabilities. The modernized Infantry Battalion of the Indian Army is provided with the state-of-the-art weapon systems of great lethality, range and precision, thermal imaging devices, bullet and mine-proof vehicles and secure radio sets enhancing its combat potential, surveillance and counter-insurgency capabilities.

NAVY

India sits astride the major sea routes of the world. It has a coastline of 7,516 km with a total of 1,197 island territories in the Bay of Bengal and the Arabian Sea. India has an Exclusive Economic Zone (EEZ) of 2.01 million sq. km. 90 per cent by volume and 77 per cent of total value of India’s trade comes from the seas. The resource rich EEZ provides 68 per cent of its oil production and fish production of 2.82 million tonnes. In addition, the entire import of oil and gas comes by the sea. India’s economy and therefore its development is crucially dependent on the sea on account of the critical role of maritime trade as well as oil and gas, fisheries and other mineral resources. The responsibility for the defence and security of these maritime interests and assets devolves upon the Indian Navy.

It has been the objective of the Navy to prepare for all manner of contingencies through meticulously planned operations that hone the skills of personnel; exhaustively evaluated induction of the most appropriate equipment; and focussed training to get the best from the personnel.

The Indian Navy, has grown in stature as a self confident, highly professional and responsible force for stability and support in the region. The Indian Navy, today, is a complete reflection of the nation's growing economic, technological and diplomatic eminence. Strength of Indian navy lies not only in high technology ships, submarines and aircraft but also in the cadre of highly disciplined, professional competent personnel who man these machines .

The Raksha Mantri had INS Shardul, commissioned on January 4, 2007, which is the first of three Landing Ship Tanks (Large), constructed at Garden Reach Ship Engineers Ltd., Apart from it, Fast Attack Crafts (FACs) IN FACs Bangaram, Bitra, Batti Malv and Baratang, have been inducted.

COAST GUARD

The Indian Coast Guard (ICG) came into existence with the enactment of the Coast Guard Act, 1978 on 18 August 1978. The Coast Guard is responsible for surveillance of the Indian territorial waters and the Indian Exclusive Economic Zone to prevent

poaching, smuggling and other illegal activities; to conduct search and rescue operations; to protect and preserve marine environment.

The command and control of the Coast Guard lies with the Director General of Coast Guard, Headquartered at New Delhi. The organisation has three Regional Headquarters at Mumbai, Chennai and Port Blair. The three Regional Headquarters command the entire coastline of India, through 11 Coast Guard Districts and six Coast Guard stations.

The primary duties of the Coast Guard as enshrined in the Coast guard Act include : (a) Safety and protection of artificial islands and offshore installations; (b) Providing protection to fishermen; (c) Preservation and protection of marine environment including maritime pollution and protection of endangered species; (d) Assistance to customs and other authorities in anti smuggling operations; (e) Enforcement of the Maritime Laws of India; (f) Safety of life and property at sea; (g) Other duties as and when prescribed by Government of India; (h) Assistance to Indian Navy during war.

AIR FORCE

The primacy of Air Power will be a decisive factor in shaping the outcome of future conflicts. In line with this dictum, the Indian Air Force (IAF) has developed into a major 'Component of National Power', which can be applied quickly and decisively. The IAF has reoriented itself to a multi-role capability of platforms and equipment, along with multi-skill capability of personnel. The rapid economic growth of the country dictates the need to protect our security interests extending from the Persian Gulf to the Straits of Malacca.

Over the years the IAF has grown from a tactical force to one with transoceanic reach. The strategic reach emerges from induction of Force Multipliers like Flight Refuelling Aircraft (FRA), Unmanned Aerial Vehicle (UAV) and credible strategic lift capabilities. There is emphasis on acquiring best of technology through acquisitions or upgradation, be it aircraft, systems, precision missiles or net centricity. The main inductions and acquisitions by Indian Air Force are given in the following paras.

All the Jaguar twin seater aircraft are soon being upgraded to Final Operational Clearance standard in a phased manner. New single seater Jaguar aircraft are also being procured from Hindustan Aeronautics Limited (HAL), Bangalore. The Indian Air Force is to replace Kiran trainer aircraft utilized in the Intermediate State Training. HAL has been assigned the task for Design and Development of this new Intermediate Jet Trainer aircraft.

The Light Combat Aircraft (LCA) is scheduled to replace the ageing MiG-21 fleet in the IAF. The formation of first squadron of LCA is planned in 2010. IAF is procuring Advanced Light Helicopters (ALHs) from HAL as a replacement to its Chetak / Cheetah fleet as a utility helicopter. The manufacture of Hawk Advance Jet Trainer (AJT) aircraft. for supply to IAF has commenced in UK. Additionally, the HAL license built Hawk AJT will be delivered from 2008 to 2010. Airborne Warning and Control System (AWACS) aircraft are being procured to meet the long felt needs of the IAF. The IL-76 based AWACS will significantly enhance the surveillance and monitoring of Aerial Vehicles / Aircraft.

COMMISSIONED RANKS

The following are the commissioned ranks in the three Services; each rank is shown opposite its equivalent in the other Service:

Army	Navy	Air Force
General	Admiral	Air Chief Marshal
Lieutenant General	Vice-Admiral	Air Marshal
Major General	Rear Admiral	Air Vice-Marshal
Brigadier	Commodore	Air Commodore
Colonel	Captain	Group Captain
Lieutenant Colonel	Commander	Wing Commander
Major	Lieutenant Commander	Squadron Leader
Captain	Lieutenant	Flight Lieutenant
Lieutenant	Sub-Lieutenant	Flying Officer

RECRUITMENT

The Armed Forces epitomises the ideals of service, sacrifice, patriotism and our country's composite culture. The recruitment to the Armed Forces is voluntary and every citizen of India, irrespective of his caste, class, religion and community is eligible for recruitment into the Armed Forces provided he meets the laid down physical, medical and educational criteria.

Recruitment of Commissioned Officers in the Armed Forces through UPSC : Commissioned Officers in the Armed Forces are recruited mainly through the UPSC which conducts the following two All India Competitive Examinations:-

(i) National Defence Academy (NDA) and Naval Academy (NA) : The UPSC old entrance examination twice a year for entry into the NDA and NA. Candidates on completion of 10+2 examination or while in the 12th Standard, are eligible to compete.

(ii) Combined Defence Services Examination (CDSE) : CDSE is conducted by the UPSC twice a year. University graduates are eligible to appear in the examination. Successful candidates join the Indian Military Academy / Air Force Academy and Naval Academy for Regular and Officers Training Academy (OTA) for Short Service Commission.

RECRUITMENT IN ARMY

Apart from the UPSC entries, the commissioned officers are recruited in the army through the following manner:-

(a) University Entry Scheme (UES): Final / pre-final year students in the notified engineering disciplines are eligible to apply for Permanent Commission in the Technical Arms of the Army as Commissioned Officers under the UES. Eligible candidates are selected through a campus interview by the Screening Teams deputed by the Army Headquarters. These candidates are required to appear before SSB and Medical Board.

(b) Technical Graduates Course (TGC): Engineering graduates / post graduates

from notified disciplines of engineering are eligible to apply for Permanent Commission through this entry. After the SSB and the Medical Board, the selected candidates are required to undergo one year pre-commission training at the IMA, Dehradun.

(c) Short Service Commission (Technical Entry : The Short Service Commission (Technical) Entry Scheme Provides avenue for recruitment to eligible technical graduates / post graduates into Technical Arms. After SSB and Medical Board, the selected candidates are required to undergo approximately 11 months pre-commission training at OTA, Chennai.

(d) 10+2 Technical Entry Scheme (TES): Candidates who have qualified 10+2 CBSE / ICSE / State Board Examination with minimum aggregate of 70% marks in Physics, Chemistry and Mathematics are eligible to apply for commission under the 10+2 (TES).

(e) Women's Special Entry Scheme Officers (WSES-O) : Eligible women candidates are recruited in the Army as Short Service Commissioned Officers through the (WSES-O). Commission is granted in Corps of Electronics and Mechanical Engineers, Signals, Army Education Corps, Army Ordinance Corps, Army Supply Corps, Military Intelligence Corps, Judge Advocate General's Branch and Army Air Defence.

(f) NCC (Special) Entry Scheme : University graduates possessing NCC 'C' Certificate with minimum 'B' grade and 50% marks in graduation examination are eligible to apply for Short Service Commission through this entry. Such cadets are exempted from written examination conducted by the UPSC and are directly put through the SSB interview followed by a medical board.

Recruitment of Personnel Below Officer Rank (PBOR) : Recruitment of PBOR in the Army is carried out through open rallies. After the preliminary screening of aspiring candidates at rally site followed by document checking and physical fitness test their medical examination is conducted by Recruiting Medical Officers at the rally site. This is followed by a written examination for the medically fit candidates. Successful candidates are sent to respective training centres for training.

There are eleven Zonal Recruiting Offices, two Gorkha Recruiting Depots and One Independent Recruiting Office in addition to 47 Regimental Centres which carry out recruitment through rallies in their respective areas of jurisdiction.

RECRUITMENT IN INDIAN NAVY

Recruitment of Officers : Recruitment for the Non-UPSC entries is made for the following Branches / Cadres of the Navy:-

(i) Executive : Short Service Commission for Air Traffic Control / Law / Logistic / Naval Armament Inspectorate (NAI) / Hydro cadres and also Permanent Commission for Law / NAI Cadres.

(ii) Engineering (Including Naval Architects): Short Service Commission through University Entry Scheme (UES), Special Naval Architects Entry Scheme (SNAES) & SSC (E) Schemes. Permanent Commission Through 10+2 (Tech) Scheme.

(iii) Electrical Engineering : SSC entry is through UES and SSC(L) Schemes. Permanent Commission is through 10+2 (Tech) Scheme.

(iv) Education Branch : Permanent Commission and Short Service Commission schemes exist for this branch.

(v) 10+2 (Tech) Scheme : The Scheme is a Permanent Commission entry for commission in the Engineering and Electrical branches of the Indian Navy. Under the scheme, candidates with 10+2 (PCM) pass qualification, after selection through the Services Selection Board, are sent to the Naval Academy for the Naval Orientation Course. Thereafter, they undergo a four-year Engineering course at INS Shivaji/ Valsura.

(vi) University Entry Scheme (UES) : The UES has been relaunched w.e.f. August 2005 course, as a Short Service Commission Scheme. Final and Pre-Final year Engineering students are eligible for induction into the technical Branches / Cadres of the Navy.

(vii) Women Officers : Women are being inducted into the Navy, as Short Service Commission (SSC) officers in the Executive (ATC, Law & Logistic Cadres) and the Education Branch.

(viii) Recruitment through NCC: University graduates Possessing NCC 'C' certificate, with minimum **'B'** grading and 50% marks in the graduation degree examination, are inducted in the Navy as regular commissioned officers. These graduates are exempted from appearing in the Combined Defence Services Examination (CDSE) and are selected through the Service Selection Board (SSB) interview only.

(ix) Special Naval Architecture Entry Scheme : An empowered Naval team visits IIT Kharagpur, IIT Chennai, Cochin University of Science and Technology (CUSAT) and Andhra University, where B Tech (Naval Architecture) course is conducted, to select the candidates through campus interviews. The selected candidates undergo medical examination at the nearest Military Hospital and, if found fit, are sent for training under this scheme.

Recruitment of Sailors : Recruitment of sailors in the Navy is also carried out through a process of a written examination, physical fitness test and medical examination. The various entries, for recruitment of sailors, are as follows :-

(i) Artificer Apprentices (AAs)-10+2 (PCM).

(ii) Direct Entry (Diploma Holders) [DE (DH)]-Diploma in Mechanical / Electrical / Electronics / Production / Aeronautical / Metallurgy / Shipbuilding.

(iii) Metric Entry Recruits-Matriculation.

(iv) Non-Matric Entry Recruits-Below Matric.

(v) Direct Entry Petty Officer (Outstanding Sportsmen).

RECRUITMENT IN INDIAN AIR FORCE

Officers' Selection in Indian Air Force : UPSC Entries for Indian Air Force is confined to Flying Branch Only. For Technical and Non-Technical branches, recruitment is carried out through various direct entries by Air Headquarters.

Aspiring Engineering Graduates, both Men and Women, undergo Engineering Knowledge Test (EKT) held at different Air Force Stations followed by selection tests at Air Force Selection Boards. On successful completion of 74 weeks training, they are inducted in Electronics and Mechanical streams. Final / pre-final year students in the specified Engineering disciplines are eligible for induction through University Entry Scheme (UES).

Post Graduate and Graduate candidates, both Men and Women, aspiring to

join Non-Technical Branches undergo a Common Entrance Test (CET) held twice a year at various Air Force Stations followed by selection tests at Air Force Section Boards.

Selection of Airmen : The selection of suitable candidates for enrolment as Airmen is carried out through a centralized selection system on All India basis by Central Airmen Selection Board, located at New Delhi with the help of fourteen Selection Centres spread all over the country.

NATIONAL CADET CORPS

The National Cadet Corps (NCC) was established under the NCC Act, 1948. It has completed 58 years of existence. The NCC strives to provide the youth of the country opportunities for all round development with a sense of commitment, dedication, self-discipline and moral values, so that they become good leaders and useful citizens and can take their appropriate place in all walks of life in the service of the nation. The total sanctioned strength of NCC cadets is 13 lakh. The NCC's presence can be felt in almost all the districts of the country covering 8410 schools and 5251 colleges.

Directorate General, NCC located at New Delhi controls and oversees various activities of the NCC through 16 NCC Directorates spread across the country. There is a Central Advisory Committee for the NCC to provide overall policy guidelines. NCC is manned by the service personnel, Whole Time Lady Officers, teachers/ professors and civilians. One lecturer/teacher in each educational institution is appointed Associate NCC officer.

TERRITORIAL ARMY

The Territorial Army is a voluntary, part-time citizen’s Army. The conceptual framework for the Territorial Army is based on the fundamental idea that it should exist for wartime employment, and should be maintainable at the lowest cost during peace time. The concept encompasses the employment of disciplined, dedicated and a low cost force of gainfully employed citizens from all walks of life to supplement and augment the resources of the regular Army. These citizens on joining the Territorial Army undergo a short period of rigorous training, which makes them reasonably competent soldiers. Subsequently, they join their units for two months every year for refresher training, to keep in touch with the art of soldiering.

Infantry Battalions (TA) have been embodied for operational services since the raising of the force. Units of the Territorial Army have participated in all wars alongside the regular Army. In recent times, a maximum of 22 units were embodied in Operation Rakshak, Operation Vijay and Operation Parakram. Infantry Battalions (TA) have also been embodied for counter insurgency operations in North-East and Jammu and Kashmir. They have been utilised to maintain essential services like railways, oil supply and medical (departmental units) during emergencies. Some units have been organised for national development tasks in fields like ecology and afforestation and they have rendered commendable services.

NATIONAL CADET CORPS

The National Cadet Corps (NCC) established on 15 July 1948 has emerged as the single largest structured youth movement in India. It has a sanctioned strength of 13 lakh boys and girls in the Senior and Junior Divisions in the Army, Navy and Air Force Wings.

The Directorate General, NCC located at New Delhi controls and oversees various activities of the NCC through 16 NCC Directorates spread across the country. There is a Central Advisory Committee for the NCC to provide overall policy guidelines. NCC is manned by the service personnel, Whole Time Lady Officers, teachers / professors and civilians. One lecturer / teacher in each educational institution is appointed as Associate NCC officer.

The NCC strives to provide opportunities to the youth of the country for their all-round development with a sense of commitment, dedication, self-discipline and moral values so that they become goods leaders and useful citizens.

The NCC aims to develop character, comradeship, discipline, leadership, secular outlook, spirit of adventure and the ideals of selfless service amongst the youth of the country. It works to create a human resource of organised, trained and motivated youth to provide leadership in all walks of life and to provide a suitable environment to motivate the youth to take up a career in the Armed Forces.

TRAINING INSTITUTIONS

The environment in which the defence officers have to work, demand a holistic approach to training. Training aims at equipping the officers and soldiers with necessary inputs to make them efficient fighting men and also well-informed on national and international developments. The training requirements are properly matched for the freshly recruited officers, for officers in need of advanced and specialised training, and for Other Ranks (ORs). Accordingly, a large number of training institutions in the Defence Sector work in coordination with one another to achieve these objectives. Some of the important ones are mentioned below.

Sainik Schools : Sainik Schools were established as joint venture of the Central and State Governments. These are under the overall governance of Sainik Schools Society. At present there are 20 Sainik Schools located all over India.

The objectives of Sainik Schools include brining quality public school education within the reach of the common man, all-round development of a child's personality and to remove regional imbalance in the officers' cadre of the Armed Forces. The Sainik Schools prepare boys academically, physically and mentally to join Armed Forces through the National Defence Academy (NDA).

Military School : The five Military Schools in the country at Ajmer, Bangalore, Belgaum, Chail and Dholpur are affiliated to CBSE. The Military Schools admit boys in class VI, based on an all-India Entrance Examination. The aim of Military Schools is to impart quality education to enable the students to take All India Secondary School Examination and Senior Secondary Examination conducted by CBSE and also to facilitate their entry into the National Defence Academy.

Rashtriya Indian Military College : The Rashtriya Indian Military College (RIMC), Dehradun was founded on 13 March 1922 with the objective of providing necessary preliminary training to boys of Indian birth or domicile, wishing to become officers in Indian Armed Forces of India. The RIMC is now a premier educational institution in the country. For more than eighty years the college has been preparing cadets for leadership in the Armed forces. The institution now serves as a feeder institute to the National Defence Academy, Khadakvasla (Pune).

National Defence Academy : The National Defence Academy (NDA), Khadakwasla is a premier Inter Service training institution where future officers of Armed Forces are trained. The training involves an exacting schedule of three years before the

cadets join their respective Service Academies, viz, Indian Military Academy, Naval Academy and Air Force Academy.

Indian Military Academy : The Indian Military Academy (IMA), Dehradun transforms young men into courageous, dynamic and erudite young officers of integrity, who are to bear the brunt of battle, or hardship whilst guarding the nation's frontiers. IMA established in 1932, imparts training to cadets for commission into the Army.

Officers Training Academy : The Officers Training Academy (OTA), Chennai moulds young men and women into courageous, dynamic and honourable officers of the Indian Army. The training at the OTA aims at inculcating in the Gentlemen and the Lady Cadets (GCs / LCs) moral values, leadership traits, mental and physical prowess, a spirit of adventure and a will to win.

Defence Services Staff College : Defence Services Staff College (DSSC), Wellington is a premier tri-service training establishment imparting training to middle level officers (Majors and equivalent) of the three wings of Indian Armed Forces, friendly foreign countries and Indian civil services.

College of Defence Management : The Institute of Defence Management (IDM), Secunderabad was established in June 1970 to impart modern, scientific management training to the Armed Forces Officers. The IDM was renamed as College of Defence Management (CDM) in 1980. The College has trained over 5000 officers of the rank of Major to Major General and equivalents of the three Services through its on-campus programmes. It has also given exposure in defence management to a large number of officers through external capsules. Officers from Para Military Forces, Ministry of Defence, Research and Development Organisations and friendly foreign countries also attend various on-campus programmes.

College of Military Engineering : The College of Military Engineering (CME) at Pune is a premier technical institution. The training is conducted for personnel of the Corps of Engineers, other Arms and Services, Navy, Air Force, Para Military Forces, Police and Civilians. Besides, personnel from friendly foreign countries are also trained. CME is affiliated to Jawahar Lal Nehru University(JNU) for the award of B. Tech and M. Tech degrees.

National Defence College : The National Defence College (NDC) inaugurated on 27 April 1960 is the only institution in the country that imparts knowledge on all aspects of national security and strategy. Senior Defence and Civil Service Officers participate in a 47-week comprehensive programme of national security and strategy.

PRODUCTION

The Department of Defence Production deals with the indigenisation, development and production of defence equipment both in the public and private sectors. The Department has 8 Defence Public Sector Undertakings and 39 ordnance factories with a wide-ranging production infrastructure for aircraft and helicopters, warships, submarines, heavy vehicles and earth movers, missiles, a variety of electronic devices and components for the defence sector, and alloys and special purpose steel. Since Independence, the defence production sector has been developing steadily, with the objective of achieving self-reliance. The Ordnance Factories Organization is a fine blend of old and state-of-the-art factories. The first Ordnance Factory was established in 1801 at Cossipore, near Kolkata. There are 39 Ordnance Factories,

geographically distributed all over the country at 24 different locations. The 40th Factory is being set up with the state-of-the-art technology at Nalanda, Bihar.

ORDNANCE FACTORIES

The Ordnance Factories organisation is the largest and oldest departmentally run production organistion in the country and is primarily engaged in the manufacture of Defence hardware for the Armed forces. The Ordnance Factories were established with a mandate to ensure self-reliance in manufacturing of Defence hardware–a role that has been successfully fulfilled over the years by continuous expansion of manufacturing base and upgradation of technology.

DEFENCE UNDERTAKINGS

The Defence Public Sector Undertakings (DPSUs) were structured with a flexible form of operation, decentralised management and adequate operational autonomy. Eight Public Sector Undertakings are currently functioning under the Department of Defence Production. These are Hindustan Aeronautics Limited(HAL), Bharat Electronics Limited (BEL), Bharat Earth Movers Limited(BEML), Mazgaon Dock Limited (MDL), Garden Reach Shipbuilders and Engineers Limited (GRSE), Goa Shipyard Limited(GSL), Bharat Dynamics Limited (BDL) and Mishra Dhatu Nigam Limited (MIDHANI).

The Hindustan Aeronautics Limited (HAL) was formed in October 1964 with its Corporate Office at Bangalore. The Company has 16 production divisions and 9 R&D Centres located in six States. It is the largest public sector undertaking under the Department of Defence Production. HAL's product range consists of aircraft, helicopters, aero-engines, accessories and avionics. It has diversified into manufacture of structures for aerospace launch vehicles and satellites and Industrial and Marine Gas turbine engines. HAL is a Memorandum of Understanding (MOU) signing company and has been declared as Mini-Ratna (Category 1) Company.

Bharat Electronics Limited (BEL) is the leading professional electronics company in the country engaged in the design, development and manufacture of sophisticated state-of-the-art electronic equipment / components for the use of defence services, paramilitary organisations and other infrastructure providers in the telecom sector. BEL is a "MINI RATNA" category I company. Based on the MoU performance, the company has been rated in the "Excellent" category continuously for the last 8 years by the Department of Public Enterprises (DPE). With its 9 production units and 31 manufacturing divisions spread across 7 states, the company focuses on Research and Development to generate business using the 'State-of-the-art' manufacturing and testing facilities. The company has been well recognized, manifesting in the large number of recognitions / prizes.

The Bharat Earth Movers Limited (BEML) was established in May 1964 and commenced operations from January 1965. The Government of India holds 61.23 per cent of equity capital of the company and continues to be the major shareholder. BEML is the prime earth moving and construction equipment manufacturer in the country and also produces ground supporting equipment for armed forces for movement of men and material. The company also manufactures railway coaches and wagons for Indian Railways and defence forces. Recently, BEML has diversified its business by successfully assembling state-of-the-art stainless steel metro coaches for Delhi Metro Rail Corporation (DMRC) under technical collaboration with M / s Rotem of South Korea.

Garden Reach Shipbuilders and Engineers Limited (GRSE), was taken over by the Government of India on 1 April 1960. GRSE is among the leading shipyards in the country and the premium yard in the East. GRSE builds a wide range of ships ranging from sophisticated warships to ultra modern commercial vessels and from small Harbour craft to fast and powerful patrol vessels. India's first ever tranker fleet too was built at GRSE. The latest on the list is new generation hovercraft.

Goa Shipyard Limited (GSL), the youngest and smallest of the Defence shipyards, has the privilege of having implemented the first successful enterprises planning system amongst the Defence Public Sector Undertakings. Primarily a Shipbuilding company, GSL has diversified itself into activities like marketing Stern Gears, design and construction of Damage Control Simulator (DCS), Survival at Sea Training Facility (SSTF) and GRP boats. The shipyard has built and delivered 181 vessels to the Navy, Coast Guard and other authorities. GSL has bagged the SODEF Golden Award for TEchnology Development & Innovation.

The Bharat Dynamics Limited (BDL) was set up in 1970 for manufacture guided missiles. It is amongst a few strategic industries in the public sector and possesses the capability to produce advanced Guided Missile Systems. The Company has two units, one at Kanchanbagh, Hyderabad and the other at Bhanur, Medak District. The Company is working in close association with DRDO for technology absorption of missiles. The Milan, Konkurs, Prithvi and Information Technology Divisions of the company have ISO 9001:2000 certification.

Mishra Dhatu Nigam Limited (MIDHANI) was incorporated as a Public Sector Undertaking in 1973 to achieve self-reliance in areas of Super alloys, Titanium alloys and Special Purpose Steels required for strategic sectors like Aeronautics, Space, Armaments, Atomic Energy and Navy. The Company has received award for Development of Technology and Innovation from Society of Defence Technologists for significant contribution in the area of extensive development of Titanium and its alloys for Aerospace in general and development of niobium based alloy (NIOBHAT-101) for satellite applications.

DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION

Science drives the nation in peace and war. Impact of science in any country is manifold namely social, strategic and financial. The vision of DRDO is to empower India with cutting-edge defence technologies. It has the mission of achieving self-reliance in critical defence technologies and systems by indigenisation and innovtion while equipping the armed forces with state-of-the-art weapon systems and equipment.

DRDO came into existence in 1958. It was the amalgamation of Technical Dev Establishment (TDEs) of Indian Army and Directorate of Tech Dev and Production (DTDP) with Defence Science Organisation (DSO).

DRDO is headed by the Scientific Advisor to Raksha Mantri (SA to RM), who is also the Secretary, Deptt of Defence R&D and Director General, R&D. The SA to RM is assisted by 7 Chief Controllers. The Organisation has a two tier system, viz., the Technical and Corporate Directorates at DRDO Bhawan, New Delhi; and laboratories/Establishments located at different stations all over the country. The following is the Organisational structure of DRDO. Dr DS Kothari was the first SA to RM.

- Total No. of Labs/Estts-52.

- Manpower Training Institutes-3
- Integrated Test Range for performance evaluation-2
- Total strength of DRDO-30,000
- Total No. of Scientists-7,000
- No. of technical personnel-13,000
- No. of Admin and Support staff-10,000.

The responsibilities of DRDO can be consolidated under the following catagories:

- Design, Development & Lead to Production of state-of-art Sensors, Weapon Systems, Platforms and Allied equipments (Strategic systems, Tactical systems, Dual Use technologies).
- Research in Life sciences, to optimise combat effectiveness and promote well-being of service personnel in harsh environment.
- Develop infrastructure and highly trained Manpower for strong defence technology base.

The value of orders executed / under execution to services by DRDO has been Rs 25166 crores against R&D cost of Rs 5366 crores thereby generating a Return of Investment of approximately 5 times.

Some of the major contributions of DRDO has been the following :

S.No.	Systems	Systems Developed / Accepted / Introduced
1.	Missile System	Agni, Prithvi, Brahmas, Dhanush, Trishul, Akash & Nag
2.	Naval System	HUMSA, USHUS, TAL, Torpedoes-Fire Control System and Advanced Experimental
3.	Electronic Systems	SAFARI, ACCCS, Surveillance Radar, SAMUKTA, SANGRAHA, WLR, SV-2000, CIDSS, CNR and Indra
4.	Combat Vehicle and Eng.	MBT, Arjun, Armored, Engg Recce Vehicle (AERV) Bridge Layer Tank, Armored Amphibious Dozer, SARVATRA, Trackway Expedient Mat Ground Surfacing, Armored Ambulance BMP-II, Career Mortar Tracked on BMP-II, & Operation Theatre Complex on wheels
5.	Aero Systems	LCA, Lakshya Pilotless Aircraft, Nishant UAV "Tempest" EW Suite, Tranquil Radar Waring Receiver (RWR), Tarang RWR Project Vetrivale, High Accuracy Direction Finding (HADF) RWR, Jaguar Mission Computer & Bheema 1000 Aircraft Weapon Loading Trolley
6.	Armament Systems	5.56mm INSAS (Amn. LMG & Rifle), Pinaka-Multibarrel Rocket Launcher System, FSAPDS Mk-I/II Ammunition, Influence Mines Mk-I, Multimode Grenade etc.
7.	Materials	AB Class Steel for Naval Applications, Titanium Sponge, NBC Protective Clothing / Permeable Suites, Extreme cold weather Clothing systems, Blast Protection Suits, Synthetic Life Jacket, Anti Riot Polycarbonate Shield, Anti Riot Helmet, Brake pads for Aircraft, Heavy alloy Armour Penetrator Rods, Jackal Armour, Kanchan Armour, Spade M1, Hydraulic

		Pipeline for Submarine Applications, investment Casting of Turbine components etc.
8.	Life Sciences Systems	Life Support Systems a for Army, Navy and Airforce Personnel, NBC Canister, Water Prison Detection Kit, Portable Decontamination Apparatus, NBC Filters / Ventilation systems, First Aid Kit CW Type A / B, Decontamination kit / Solution.

However, the production value of the DRDO products is by no means the only measure of impact that it has made in its Strategic systems development. These systems cannot be imported or developed jointly with any country in the present era of embargo and technology denial. The other intangible benefits that DRDO offers are its capability in a broad range of militarily critical advanced technologies, efforts in ensuring continuity of supply of components, spares in face of changing international scenario, developing a self reliant defence R&D base, spin-offs into civil industry and evaluation of imports of cutting edge technologies. The major partners in our nation building endeavors have been the 3 arms of the user services, Defence PSUs, Private Industry, International Collaborators and Academic / Researchers.

In addition DRDO has attracted young students to take up defence S&T as career option. The number of PhDs in DRDO under the DRDS category alone today exceeds 640. A good number of national and international patents, IPR, Copy-rights, Designs, Trademarks etc as well as papers with impact factor are being published by our scientists. IT is a true 'knowledge bank' for the nation and owner of a vast intellectual property. DRDO offers to its employees adequate professional ambience in terms of flexibility of operation, autonomy, financial and managerial responsibilities. Advanced training, career and self development needs of the scientists are also given due attention. DRDO has also over its 50 years of existence contributed immensely in developing a sound academic and industrial base in the country.

The DRDO employees routinely perform duties that are unique in nature. Several projects in DRDO are mission made and field oriented. In addition to carrying out field trials for several months at a stretch under harsh environments like deserts and high altitude cold areas, the DRDO scientists are also often posted at Hard Stations like Leh. Tezpur etc. Further the scientist is also expected to carry out extensive airborne and ship borne trials as part of their project responsibilities.

Year 2008 will be a significant milestone for DRDO, being in service to the nation for 50 years. 'DRDO Raising Day' on 01 Jan'08 will mark the launch of the year-long Golden Jubilee Celebrations.

RESETTLEMENT OF EX-SERVICEMEN

The Department of Ex-Servicemen Welfare formulates various policies for the welfare and resettlement of ESM in the country. The Department has two Divisions, Resettlement Division and Pension Division and is assisted by two Inter Services Organisations, i.e., Directorate General of Resettlement (DRG) and Kendriya Sainik Board (KSB). While the KSB, which is headed by Raksha Mantri as an ex-officio President of the Board, lays down general policies for the welfare of ESM and their dependents and also for administration of welfare funds, the Directorate General

of Resettlement implements various policies / schemes / programmes of the Government.

The KSB / Directorate General of Resettlement are also assisted in their task by various Rajya Sainik Boards / Zila Sainik Boards which are under the administrative control of respective State Governments. The Government of India bears 50 per cent of the expenditure incurred on the organisation of RSBs while the remaining 50 per cent expenditure is borne by the respective State Governments, since the welfare and resettlement of ESM is the joint responsibility of the Central Government as well as the State Governments.

The primary thrust of the Directorate General of Resettlement, Kendriya Sainik Board, Rajya Sainik Boards and Zila Sainik Boards is on dignified resettlement, and efforts are made to explore various avenues for employment of ex-servicemen. To resettle / reemploy ex-servicemen, the Central Government arranges the following : (a) Training programmes to reorient retiring Defence personnel towards civil employment. (b) Reservation of posts for providing employment opportunities in government / semi-government / public sector organisations and assistance in employment with corporate sector. (c) Schemes for self-employment, and (d) Assistance in entrepreneurship and setting up small-scale industries.

Officers Training : The Directorate General of Resettlement organises employment oriented training programmes for officers to enhance their qualifications and enable them to seek suitable employment after retirement. The Resettlement Training Programmes range from vocational courses of three months duration to degree / diploma courses, via distant learning programme, of one to three years duration.

Junior Commissioned Officers (JCOs) / Other Ranks (ORs) Equivalent Training: Resettlement Training Programmes for union Commissioned Officers / Other Ranks and their equivalent are carried out under two different heads, viz. Vocational Training and ITI Training. The training courses are conducted in diversified fields for a duration of upto one year in government, semi-government and private institutes spread all over the country. Three day capsules on Second Career Transition / Preparation have also been introduced in all Regimental Centres across the country for retiring PBOR in order to arm them with sufficient information for a smooth transition to a second career in the civil market.

Ex-servicemen (ESM) Training : Under this scheme, funds are allotted to Rajya Sainik Boards for conducting vocational training for ESM in their States. The scheme is primarily meant for those ESM who could not avail the facility of resettlement training while in service.

Re-Employment of Ex-Servicemen : The Central and State Governments provide a number of concessions to Ex-Servicemen for their re-employment in Central / State Government posts. These include reservation of posts / relaxation in age and educational qualifications, exemption from payment of application / examination fees, and priority in employment to the disabled ESM and dependents of deceased service personnel on compassionate grounds.

Reservation for Ex-Servicemen in Government Jobs : The Central Government has reserved 10 per cent of Group “C” posts and 20 per cent of Group “D” posts for ESM, while central PSUs and nationalised banks provide 14.5 per cent reservation in Group “C” and 24.5 per cent in Group “D” posts. 10 per cent posts of Assistant Commandants in paramilitary forces are also reserved for ESM. In Defence Security

Corps, 100 per cent vacancies are reserved for ESM. In addition, most State Governments, except for the States of Arunachal Pradesh, Assam, Bihar, J&K, Kerala and Meghalaya, are providing reservations to ESM in State Government jobs.

Employment in Security Agencies Registered by DGR : The DGR registers / sponsors security agencies for providing security guards to various PSUs and industries in private sector. The scheme offers good self-employment opportunities to retired officers and adequate employment opportunity to ex-PBORs in a field where they have sufficient expertise. The Department of Public Enterprises (DPE) had issued instructions to all PSUs to get security personnel through State Ex-Servicemen Corporations located in concerned State or DGR sponsored Security Agencies. The scheme has shown good results. Through the scheme about 1800 Ex-Servicemen security agencies have been empanelled and approximately 1,10,000 Ex-Servicemen have gained employment.

SCHEMES FOR SELF-EMPLOYMENT

As it is not feasible to provide government jobs to all Ex-Servicemen after their retirement from the Armed Forces, Government has formulated several schemes for encouraging and giving financial support by way of loans to ex-servicemen entrepreneurs intending to set up small and medium industries. Major self-employment schemes are SEMFEX-II, SEMFEX-III and National Equity Fund Scheme.

SEMFEX-II Scheme : The scheme has been promoted with the assistance of NABARD to set up agriculture and allied activities, including State Road Transport Organisations (SRTO), and also for setting up of village, cottage, tiny and small-scale industries in rural areas. The financial assistance in case of non-farm sector activities is available upto SSI limit, for setting up industries in rural areas.

SEMFEX-III Scheme : The scheme is operative in collaboration with the Khadi and Village Industries Commission (KVIC). The maximum loan limit for individual entrepreneurs, cooperative societies / institutions and trusts is Rs. 25 lakh per project to establish industries in rural areas. The financial assistance in case of non farm sector activities upto SSI limit is available, for setting up industries in rural across.

National Equity Fund (NEF) Scheme : The scheme has been launched in collaboration with SIDBI. The financial assistance is available to set up projects in tiny / small-scale industrial sector, service enterprises and also for undertaking expansion, technology upgradation, modernisation and revival of viable sick units in SSI Sector.

CNG Stations in National Capital Region (NCR) : The scheme for management of CNG stations, belonging to Indraprastha Gas Limited(IGL), was launched as a pilot project in July 2001. On the success of the pilot project, the scheme has been extended to management by retired officers. This scheme is presently available in Delhi only.

Coal Transportation Scheme : The DGR sponsors Ex-Servicemen Coal Transport Companies for the execution of loading and transportation of coal in various coal subsidiaries of Coal India Limited (CIL). Unemployed retired officers and JCOs registered with DGR, are selected to form ESM Coal Transport Companies and are sponsored to respective coal subsidiaries for five years, extendable by another four years.

Allotment of Army Surplus Vehicles : Ex-Servicemen and widows of Defence personnel, who died while in service, are eligible to apply for allotment of an Army surplus phased out Class V-B vehicle.

Reservation in CSD : The Canteen Stores Department of India (CSDI) has reserved 15 per cent of the 30 selected CSD items, and the Ministry of Defence has reserved 10 per cent of the 262 selected items manufactured by Ex-Servicemen Entrepreneurs, under the Defence Purchase Programme for which Ex-Servicemen manufacturing units alone are eligible.

Mother Dairy Milk and Fruit and Vegetable Shops : Junior Commissioned Officers (JCOs), Other Ranks (ORs) are allotted Mother Dairy milk shops and fruit and vegetable shops in the National Capital Region. Dependent sons (where the Ex-Servicemen are not eligible) are also considered for allotment of fruit and vegetable shops in and around Delhi.

PM Scholarship Scheme : The Prime Minister's Merit Scholarship has been launched to encourage the wards of widows and ex-servicemen to take up higher technical and professional education. The scheme provide a scholarship of Rs. 1250 p.m for boys and Rs. 1500 p.m. for girls for the recognised professional and technical courses for a duration ranging from 2 to 5 years.

10 Education

BEFORE 1976, education was the exclusive responsibility of the States. The Constitutional Amendment of 1976, which included education in the Concurrent List, was a far-reaching step. The substantive, financial and administrative implication required a new sharing of responsibility between the Union Government and the States. While the role and responsibility of the States in education remained largely unchanged, the Union Government accepted a larger responsibility of reinforcing the national and integrated character of education, maintaining quality and standards including those of the teaching profession at all levels, and the study and monitoring of the educational requirements of the country.

The Central Government continues to play a leading role in the evolution and monitoring of educational policies and programmes, the most notable of which are the National Policy on Education (NPE), 1986 and the Programme of Action (POA), 1986 as updated in 1922. The modified policy envisages a National System of education to bring about uniformity in education, making adult education programmes a mass movement, providing universal access, retention and quality in elementary education, special emphasis on education of girls, establishment of pace-setting schools like Navodaya Vidyalayas in each district, vocationalisation of secondary education, synthesis of knowledge and inter-disciplinary research in higher education, starting more Open Universities in the States, strengthening of the All India Council of Technical Education, encouraging sports, physical education, Yoga and adoption of an effective evaluation method, etc. Besides, a decentralised management structure had also been suggested to ensure popular participation in education. The POA lays down a detailed strategy for the implementation of the various policy parameters by the implementing agencies.

The National System of Education as envisaged in the NPE is based on a national curricular framework, which envisages a common core alongwith other flexible and region-specific components. While the policy stresses widening of opportunities for the people, it calls for consolidation of the existing system of higher and technical education. It also emphasises the need for a much higher level of investment in education of at least six per cent of the national income.

The Central Advisory Board of Education (CABE), the highest advisory body to advise the Central and State Governments in the field of education, was first established in 1920 and dissolved in 1923 as a measure of economy. It was revived in 1935 and had continued to exist till 1994. Despite the fact that in the past, important decisions had been taken on the advice of CABE and it had provided a forum for widespread consultation and examination of issues relating to educational and cultural development, it was unfortunately not reconstituted after the expiry of its extended tenure in March 1994. CABE has a particularly important role to play at the present juncture in view of the significant socio-economic and socio-cultural developments taking place in the country and for the review of the National Policy on Education which is also due. It is a matter of importance therefore, that the Central and State Governments, and educationists and people representing all interests, should increase their interaction and evolve a participative process of decision making in education, which enhances the federal structure of our polity. The National Policy on Education, 1986 (as modified in 1992) also envisages that the CABE will play a

Graph

pivotal role in reviewing educational development, determining the changes required to improve the system and monitoring implementation, and will function through appropriate mechanisms created to ensure contact with, and coordination among, the various areas of human resource development. Accordingly, the CABE has since been reconstituted by the Government in July 2004 and the first meeting of the reconstituted CABE was held on 10 and 11 August 2004. The Board consists of nominated members representing various interests in addition to elected members from the Lok Sabha and the Rajya Sabha, and the representatives of the Government of India, State Governments and UT Administrations.

In the meeting of the reconstituted CABE held on 10 - 11 August 2004 some critical issues had emerged needing detailed deliberations. Accordingly, seven CABE Committees were set up to examine : (i) Free and Compulsory education Bill and other issues related to Elementary Education, (ii) Girls Education and the Common School System, (iii) Universalisation of Secondary Education, (iv) Autonomy of Higher Education Institutions, (v) Integration of Culture Education in the School Curriculum, (vi) Regulatory Mechanism for the Text Books and parallel text books taught in schools outside the Government system, and (vii) Financing of Higher and Technical Education.

The above mentioned Committees were set up in September 2004. The reports of these Committees were discussed in the 53rd Meeting of the CABE held on 14-15 July 2005 at New Delhi. Necessary steps are being taken to identify the action points emerging from all these reports and to prepare a road map for action on them in a time bound manner. In the meeting it has also been decided, inter alia, to constitute three Standing Committees of the CABE, viz., (i) A Standing Committee on Inclusive Education for Children and Youth with Special Needs to oversee the implementation of the new education policy on this subject. (ii) A Standing Committee on Literacy and Adult Education to guide the National Literacy Mission. (iii) A Standing Committee for looking at the integration and coordination of efforts for children's development, taking into account different schemes of education, child development, nutrition and health aspects.

On the recommendations made by the CABE, in its meeting held on 6-7 September 2005, a monitoring committee has been setup to oversee the preparation of syllabus for the textbooks by NCERT. Measures have been taken to reform the functioning of the accrediting and affiliating institutions by introduction of steps to receive and process the applications on-line and also bringing in the reforms in other processes by making things transparent.

Consultation process has been initiated to consider the setting up of a National Commission on Higher Education for overseeing generation of new ideas and monitoring the reforms in the higher education sector.

In order to facilitate donations including smaller amounts from India and abroad for implementing projects / programmes connected with the education sector, the Government has constituted ''Bharat Shiksha Kosh'' as a Society registered under the Societies Registration Act, 1860. It was launched officially on 9 January 2003 during the celebrations of Pravasi Bharatiya Diwas. The Kosh will receive donations / contributions / endowments from individuals and corporate, Central and State Governments, Non-Resident Indians and People of Indian Origin for various activities across all sectors of education.

EXPENDITURE

In line with the commitment of augmenting resources for education, the allocation for education has, over the years, increased significantly. The Plan outlay on education has increased from Rs 151.20 crore in the First Five-Year Plan to Rs 43,825 crore in the Tenth Five-Year Plan (2002-2007). the expenditure on Education as a percentage of DGP also rose from 0.64 per cent in 1951-52 to 3.74 per cent in 2003-2004 (BE).

The outlay for Education in the Tenth Five-Year Plan of Rs 43,825 crore, is higher than the Ninth Plan outlay of Rs 24,908.38 crore by 1.76 times. Rs 30,000 crore has been provided for the Department of Elementary Education and Literacy and Rs 13,825 crore for the Department of Secondary and Higher Education. The outlay for education during 2005-06 is Rs 12531.76 crore for the Department of Elementary Education and Literacy and Rs 2712.00 crore for the Department of Secondary and Higher Education. The expenditure during the plan periods on the different sectors of education is given in table 10.1.

ELEMENTARY EDUCATION

SARVA SHIKSHA ABHIYAN (SSA)

The Scheme of Sarva Shiksha Abhiyan (SSA) a national flagship programme, is being implemented in all districts of the country. The aim of SSA is to provide useful and relevant elemantry education for all children in the 6-14 age groupe by 2010. The scheme of Sarva Shiksha Abhiyan (SSA) was launched in 2001. The goals of SSA are as follows : (i) All 6-14 age children in school / EGS (Education Guarantee Scheme) centre / Bridge Course by 2005. (ii) Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010. (iii) Universal retention by 2010. (iv) Focus on elementary education of satisfactory quality with emphasis on education for life.

The assistance under the programme of Sarva Shiksha Abhiyan was on a 85:15 sharing arrangement during the Ninth Plan, 75:25 sharing arrangement during the Tenth Plan, and 50:50 sharing thereafter between the Central Government and the State Government except for 8 NE states, where 15% of the state there is met by Ministry of DONER for the two years 2005-06 and 2006-07.

The programme covers the entire country with special focus on educational needs of girls, SCs / STs and other children in difficult circumstances. The programme seeks to open new schools in those places which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grant. SSA has a special focus on girls and children of weaker sections. A number of initiatives, including distribution of free textbooks, target these children under the programme. The SSA also seeks to provide computer education even in the rural areas.

During 2006-07, the SSA approved 41656 primary school building, 19699 upper primary school building, 358939 additional classrooms, 6438 drinking water facility, 5634 toilet facility and free textbooks for 6.22 crore children for all 604 districts. A sum of Rs. 10863.34 crore (upto March 2007) was released by Central Government to the States / UTs.

Till December 2006 almost 1.81 lakh new schools have been opened since the inception of SSA. 149683 new school buildings and 650442 additional classrooms have been constructed or are nearing completion and 8.14 lakh new teachers have

been appointed under SSA till 31.3.2007. In the IXth Plan Rs. 576.45 crore and in the Xth Plan Rs. 27895.85 crore were provided by Government of India for SSA.

SSA has succeeded in bringing about a huge reduction in the number of out of school children from 320 lakh in 2001-02 to about 70 lakh in March 2007. The enrolment of girls during the same period increased by 19.2% at primary level and 15% at upper primary level. 67 lakh children are presently enrolled in flexible alternative schools that provide access in small, remote habitations and for specific groups of children like working children, children who migrate seasonally with families, urban deprived children etc.

EDUCATION GUARANTEE SCHEME AND ALTERNATIVE AND INNOVATIVE EDUCATION

Education Guarantee Scheme and Alternative and Innovative Education (EGS and AIE) is an important component of Sarva Shiksha Abhiyan (SSA) to bring out-of-school children in the fold of Elementary Education. The scheme envisages that child-wise planning is undertaken for each out-of-school children.

EGS addresses the inaccessible habitation where there is no formal school within the radius of one km and atleast 15-25 children of 6-14 years age group who are not going to school are available. In exceptional cases remote habitations in hilly areas even for 10 children an EGS school can be opened.

Alternative Education interventions for specific categories of very deprived children e.g., child labour, street children, migrating children, working children, children living in difficult circumstances and older children in the 9+ age group especially adolescent girls are being supported under EGS and AIE all over the country.

A sizeable number of out-of-school children are in the habitations where schooling facility is available but these children either did not join the school or dropped out before completing their schooling. These children may not fit into the rigid formal system. To bring such children back to school; back to school camp and Bridge Courses strategies have been implemented. Bridge courses and Back to school camps can be residential or non-residential depending upon the need of children.

During 2005-06, Department of Elementary Education and Literacy has considered and approved District Plans of 600 districts of 35 States / UTs. The States are participating enthusiastically in the programme.

During 2006-07 the EGS / AIE component helped to provide elementary education to 103.82 lakh children, i.e., 47.71 lakh children who were living in non-accessible habitations were provided elementary education through 1 lakh EGS centres and 31.92 lakh children not going to school were brought into Bridge Courses / Schools camps.

MID-DAY MEAL SCHEME

Background

With a view to enhancing enrollment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a Centrally Sponsored Schemeon 15th August 1995, initially in 2408 blocks in the country. By the year 1997-98 the NP-NSPE was intreoduced in all blocks of the country. It was further extended in 2002 to cover not only children in classes I-V of government, government aided and local body schools, but also children studying in EGS and AIE centres. Central

Assistance under the scheme consisted of free supply of food grains @ 100 grams per child per school day, and subsidy for transportation of food grains up to a maximum of Rs 50 per quintal.

In September 2004 the scheme was revised to provide cooked mid day meal with 300 calories and 8-12 grams of protein to all children studying in classes I-V in Government and aided schools and EGS / AIE centres. In addition to free supply of food grains, the revised scheme provided Central Assistance for (a) Cooking cost @ Re 1 per child per school day, (b) Transport subsidy was raised from the earlier maximum of Rs 50 per quintal to Rs. 100 per quintal for special category states, and Rs 75 per quintal for other states, (c) Management, monitoring and evaluation costs @ 2% of the cost of foodgrains, transport subsidy and cooking assistance, (d) Provisino of mid day meal during smmer vacation in drought affected areas.

In July 2006 the scheme was further revised to provide assitance for cooking cost at the rate of (a) Rs 1.80 per child / school day for States in the North Eastern Region, provided the NER states contribute Rs. 0.20 per child / school day, and (b) Rs 1.50 per child / school day for other States and UTs, provided that these States and UTs contribute Rs 0.50 per child / school day.

Objectives

The objectives of the mid day meal scheme are :

(i) Improving the nutritional status of children in classes I-V in Government, Local Body and Government aided scools, and EGS and AIE centres.

(ii) Encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities.

(iii) Providing nutritional support to children of primary stage in drought affected areas during summer vacation.

Programme Intervention and Coverage

To achieve the above objectives a cooked mid day meal with nutritional content as shown in column 3 of the table below will be provided to all children studying in classes I-V:

Nutritional Content	Norm as per NP-NSPE, 2004	Revised Norm as per NP-NSPE, 2006
Calories	300	450
Protein	8-12	12
Micronutrients	Not Prescribed	Adequate quantities of micronutrients like iron, folic acid, vitamin-A etc.

Components of the revised scheme

The revised scheme provides for the following components:

(i) Supply of free **food grains** (wheat / rice) @ 100 grams per child per School Day from the nearest FCI godown :

(ii) Reimbursement of the actual cost incurred in transportation of foodgrains from nearest FCI godown to the Primary School subject to the following ceiling :

(a) Res. 100 per Quintal for 11 special category States viz. Arunachal Pradesh, Assam, Meghalaya, Mizoram, Manipur, Nagaland, Tripura, Sikkim, J&K, Himachal Pradesh and Uttaranchal, and

(b) Rs. 75 per quintal for all other States and UTs

(iii) Provision of assistance for cooking cost at the following rates :

(a) **States in North-Eastern Region :** @ Rs. 1.80per child per school day, provided the State Govt. contributes a minimum of 20 paise.

(b) **For other States & UTs :** @ Rs. 1.50 per child per school day provided the State Govt. / UT Admn. Contributes a inimum of 50- paise.

State Governments / UT Administrations are required to provide the above minimum contribution in order to be eligible for the enhanced rate of Central assistance mentioned above.

(iv) Provision of assistance for cooked Mid-Day Meal during summer vacations to school children in areas declared by State Governments as "drought-affected".

(v) Provision of assistance to consteruct kitchen-cum-store in a phased maner up to a maximum of Rs. 60,000 per unit. However, as allocations under MDMS for construction of kitchen-cum-store for all schools in next 2-3 years may not be adequate. States would be expected to proactively pursue convergence with other development programmes for this purpose. (Also please see para 2.5 in this regard).

(vi) Provision of assistance in a phased manner for provisioning and replacement of kitchen devices at an average cost of Rs. 5,000 per school. States / UT Administration will have the flexibility to incur expenditure on the items listed below on the basis of the actual requirements of the school (provided that the overal average for the State / UT administration remains Rs 5000 per school).

a. Cooking devices (Stove, Chutha, etc.)

b. Containers for storage of food grains and other ingredients.

c. Utensils for cooking and serving.

(vii) Provision of assistance to States / UTs for Management, Monitoring & Evaluation (MME) at the rate of 1.8% of total assistance on (a) free food grains, (b) transport cost and (c) cooking cost. Another 0.2% of the above amount will be utilized at the Central Government for management, monitoring and evaluation.

Monitoring Mechanism

The Department of School Education and LIteracy, Ministry of Human Resource Development has prescribed a comprehensive and elaborate mechanism for monitoring and supervision of the Mid Day Meal Scheme. The monitoring mechanism includes the following :

a. Arrangements for local level monitoring

Representatives of Gram Panchayats / Gram Sabhas, members of VECs, PTAs, SDMCs as well as Mothers' Committees are required to monitor the (i) regularity and wholesomeness of the mid day meal served to children, (ii) cleanliness in cooking and serving of the mid dayu meal, (iii) timeliness in procurement of good quality ingredients, fuel, etc.)iv) implementation of varied menu, (v) social and gender equity. This is required to be done on a daily basis.

b. Display of Information under Right to Information Act

In order to ensure that there is transparency and accountability, all schools and centres where the programme is being implemented are required to display inforamtion on a suo-moto. This includes information on :

i. Quality of foodgrains received, date of receipt.

ii. Quantity of foodgrains utilized.

iii. Other ingredients purchased, utilized

iv. Number of children given mid day meal.

v. Daily Menu

vi. Roster of Community Members involved in the progrmme.

c. Inspections by State Government Officers

Officers of the State Government / UTs belonging to the Departments of Revenue, Rural Development, Education and other related sectors, such as Women and Child Development, Food, Health are also required to inspect schools and centres where the programme is being implemented. It has been recommended that 25% of primary schools / EGS & AIE centres are visited every quarter.

d. Responsibility of Food Corporation of India (FCI)

The FCI is responsible for the continuous availability of adequate food grains in its Depots (and in Principal Distribution Centres in the case of North East Region). It allows lifting of food grains for any month / quarter upto one month in advance so that supply chain of food grains remains uninterrupted.

For the NP-NSPE, 2006, FCI is mandated to issue foodgrains of best available quality, which will in any case be at least of Fair Average Quality (FAQ). FCI appoints in Nodal Officer for each State to take case of various problems in supply of food grains under the MDM Programme.

The District Collector / CEO of Zila Panchayat ensures that food grains of at least FAQ are issued by FCI after joint inspection by a team consisting of FCI and the nominee of the Collector and / or Chief Executive Officer, District Panchayat, and Confirmation by them that the gain conforms to at least FAQ norms.

e. Periodic Returns

The State Government / UT is also required to submit periodic returns to the Department of School Education and Literacy, GoI to provide information on (i) coverage of children and institutions, (ii) Progress in utilisation of central assistance, including cooking costs, transportation, constructino of kitchen sheds and procurement of kitchen devices.

f. Monitoring by Institutions of Social Science Research

Forth One Institutions of Social Science Research, identified for monitiring the Sarva Shiksha Abhiyan, are also entrusted with the task of monitoring the mid meal scheme.

g. Grievance Redressal

States and Union Territories are required to develop a dedicated mechanism for public grievance redressal, which should be widely publicized and made easily accessible.

Extension to Upper Primary Stage

The Finance Minister has announced in the Union Budget 2007-08 that the Mid-Day Meal Scheme will be extended to cover children in upper Primary Classes in 3427 Educationally Backwards Blocks (EBBs) in 2007-08. A Budget provision of Rs. 7324 crores has been made for this purpose, representing 37% increase over the budget for 2006-07

DISTRICT PRIMARY EDUCATION PROGRAMME

The Centrally-Sponsored Scheme of District Primary Education Programme (DPEP) was launched in 1994 as a major initiative to revitalise the primary education system and to achieve the objective of universalisation of primary education.

DPEP adopts a holistic approach to universalise access, retention and improve learning achievement and to reduce disparities among social groups. Adopting an 'area-specific approach' with district as the unit of planning, the key strategies of the programme have been to retain the sensitivity to local conditions and ensuring full participation of the community. It also seeks to strengthen the capacity of national, state and district institutions and organisations for planning, management and professional support in the field of primary education.

DPEP is based on the principle of 'additionality' and is structured to fill in the existing gaps by providing inputs over and above the provisions made under Central and State Sector schemes for primary education. The State Governments are required to at least maintain expenditure in real terms at base year level.

The programme components include construction of classrooms and new schools, opening of Non-formal / Alternative Schooling Centres, appointment of new teachers, setting up early-childhood education centres, strengthening of State Councils of Educational Research and Training (SCERTs) / District Institute of Educational Training (DIETs), setting up of Block Resource Centres / Cluster Resource Centres, teacher training, development of Teaching Learning Material, Research based interventions, special interventions for promoting education of disadvantaged groups, girls, SC / ST, etc., initiatives for providing integrated education to disabled children and distance education for teacher training have also been incorporated in the DPEP Scheme.

Under the Programme parameters, investment per district is limited to Rs 40 crore over a project period of 5-7 years. There is ceiling of 33.3 per cent on civil works component and 6 per cent on management cost. The remaining amount is required to be spent on quality improvement activities.

DPEP is an externally aided project 85 per cent of the project cost is met by the Central Government and the remaining 15 per cent is shared by the concerned State Government. The Central Government share is resourced through external assistance. At present External Assistance of about Rs 6,938 crore composing Rs 5,137 as credit from IDA and Rs 1,801 crore as grant from EC / DFID / UNICEF / Netherlands has been tied-up for DPEP.

Presently DPEP is in operation in nine States covering 123 districts. DPEP at its peak was operational in 273 districts in 18 States. However, with the progressive closure of the programme, it is now existing only in 123 districts.

The programme is supervised through periodic Supervision Missions such as joint review Missions, Project Management Information System (PMIS), Educational

Management Informatics System (EMIS), Programme Impact Studies, etc. The reviews and various evaluatory studies of the programme have brought out that the programme has resulted in significant increase in enrolment, improvement in learning achievement, reduction in repetition rates / drop-outs with increased community involvement, improvements in classroom processes, etc.

Major Achievements of DPEP : (i) DPEP has so far opened more than 1,60,000 new schools, including almost 84,000 alternative schooling (AS) centres. The AS centres cover nearly 3.5 million children, while another two lakh children are covered by Bridge Courses of different types; (ii) The school infrastructure created under DPEP has been remarkable. Works either complete or in progress include 52758 school buildings, 58,604 additional classrooms, 16,619 resource centres, 29,307 repair works, 64,592 toilets, and 24,909 drinking water facilities, (iii) The Gross Enrolment Ratio (GER) for Phase-I states was around 93 to 95 per cent for the last three years. After the adjustment for the Alternative Schools / Education Guarantee Centres enrolment, the GER in the 2001-02 works out above 100 per cent. In the districts covered under subsequent phases of DPEP, the GER including enrolment of AS / EGS was above 85 per cent; (iv) The enrolment of girls has shown significant improvement. In DPEP-I districts, the share of girls enrolment in relation to total enrolment has increased from 48 per cent to 49 per cent, while this increase in the subsequent phases of DPEP districts has been from 46 per cent to 47 per cent; (v) The total number of differently-abled children enrolled is now more than 4,20,203 which represents almost 76 per cent of the nearly 5,53,844 differently-abled children identified in the DPEP States; (vi) Village Education Committees / School Management Committees have been set-up in almost all project villages / habitations / schools, (vii) About 1,77,000 teachers, including para-teachers / Shiksha Karmis have been appointed; (viii) About 3,380 resource centres at block level and 29,725 centres at cluster level have been set-up for providing academic support and teacher training facilities.

MAHILA SAMAKHYA SCHEME

Pursuant to the objectives of the NPE, 1986, the Mahila Samakhya SCheme was started in 1989 to translate the goals enshrined in the NPE into a concrete programme for the education and empowerment of women in rural areas particularly those from socially and economically marginalized groups. The MS scheme recognizes the centrality of edcuation in empowering women to achieve equality. The Mahila Sanghas or women's collectives at the village level provide the women a space to meet, reflect, ask questions and articulte their thoughts and needs and make informed choices.

The Mahila Sanghas though various programmes and awareness campaigns have brought about a change in the outlook of rural women and the effects can how be seen in various facets of life at home within the family, the community and at the block and panchayat levels. The programme has also focused on awarness of the need to educate the children, especially girls, to give the equal status and opportunities which has resulted in a direct impact on enrolment and retention of girls in schools.

The Mahila Samakhya Scheme is currently being implemented in nine States viz., Andhra Pradesh, Assam, Bihar, Jharkhand, Karnatka, Kerala, Gujarat, Uttar Pradesh and Uttarakhand spread over 83 districts and covering more than 21,000 villages. From the current financial year the programme is being extended to two new States i.e. Madhya Pradesh and Chhatisgarh. The budgetary allocation for the Scheme forthe current financial year i.e. 2007-08 is Rs. 34.00 crores.

TEACHER EDUCATION SCHEME

I. Centrally sponsored scheme of Teacher Education was launched in 1987-88 with, inter alia, the following components:

1. Establishment of District Institute of Education & Training (DIETs)-by upgradation of existing Elementary Teacher Education Institutions (ETEIs) whereever possible, and establishment of new DIET where necessary.
2. Upgradation of selected Secondary Teacher Education Institutions (STETIs) into :
   (a) Colleges of Teacher Education (CTEs) &
   (b) Institutes of Advanced Study in Education (IASEs), and
3. Strengthening of State Council of Educational Research and Training (SCERTs).

II. The Scheme was revised in 2003 and the revised guidelines were issued in January, 2004. the main objectives of the Teacher Education Scheme are as follows :

1. Speedy completion of DIET / CTE / IASE / SCERT projects sanctioned but not completed up to the end of the IX Plan period.
2. Making DIETs, IASEs sanctioned (and SCERTs strengthened) upto the IX Plan period, optimaly functional and operational.
3. Sanction and implementation of fresh DIET / CTE / IASE / SCERT projects to the extent necessary.
4. Improvement in the quality of programmes to be undertaken by DIETs, etc. especially thouse of pre-service and in-service training, so as to anable them to effectively play their nodal role of improving quality of elementary and secondary education in their respenctive jurisdiction jurisdiction, as measured in terms of levels of learner achievements.

III. Criteria for setting up of DIETs / District Resource Centre (DRC) are :

1. One DIET for each district having a minimum of 2,500 teachers. If there is an existing Government ETEI in the district, it would be upgraded inot a DIET. If no Government ETEI exists in the district, a new institution (DIET) will be established.
2. District Resource Centres in districts with less than 2,500 teachers. If a Government ETEI exists in the district, it would be upgraded into a DRC Otherwise, a new DRC would be established in which case it would not conduct pre-service course.
3. If in a district with more than 2,500 teachers, State Government whshes to establish a DRC in preference to a DIET, it would be able to do so.

IV. As on 1.4.2002, there were 599 districts in the country. Out of these, DIETs have been established in 571 districts. A total of 512 DIETs are operational. A rigorous follow up is being maintained with the States concerned to make the remaining CTEs and all of them are functional. There are 31 IASEs and all of them are functional.

V. The position with regard to release of Central assistance to States / UTs during 10th Plan is indicated below :

(Rs. in crore)

Year	Budget Estimates	Central Assistance Released	Remarks
2002-03	207.00	161.79	The scheme was under revision. Adequate proposals were not received
2003-04	207.00	149.63	do
2004-05	207.00	202.53	
2005-06	200.00	210.50	
2006-07	180.00	179.67	
Total	**1001.00**	**904.12**	

VI. In order to make proposals for the 11th Plan for Teacher Education, a sub-group under the chairmanship of Director, NCERT was setup. Based on the recommendations of the sub-group, in addition to strengthening the existing provisions of the scheme, certain new schemes are proposed to be incorporated duirng 11th Plan:

1. Augmenting teacher education capacity in SC / ST and minority areas (Block Institutes of Teacher Education)
2. Professional Development of in-service Elementary and Secondary Teachers.
   a) Training of untrained teachers and para-teachers.
   b) In-service training and subject knowledge upgradation of practiving teachers.
3. Professional development of teacher educators.
   a) Refresher courses.
   b) Fellow-ship programme.
4. Support to NGOs.
5. Special progamme for North-East.
6. Technology in Teacher Education
7. Integrating Elementary Teacher Education with Higher Education.

VII. During the current financial year i.e. 2007-08, a provision of Rs. 500 crores has been made for the Teacher Education Scheme. Out of this, Rs. 50 crores has been earmarked for North Eastern Region.

NATIONAL BAL BHAVAN

The National Bal Bhavan is an autonomous organisation fully funded by the Ministry of Human Resources Development. Department of School Education and Literacy. Since its inception in 1956, the Bal Bhavan an movement has grown by leaaps and bounds throughout the length and breadth of the country and today there are 68 State Bal Bhavans and 10 Bal Kendras that are affiliated to National Bal Bhavan. Through affiliated Bal Bhavans and Bal Kendras National Bal Bhavan reaches out to school drop-outs, children of socially and economically bakcward class, street children and also the special children. Several schools of Delhi have also taken up the membership of National Bal Bhavan and this joint and consolidated effort of format nonformal institution has indeed made creative enhancement of children a grand success.

National Bal Bhavan is engaged in pursuits for the integrated growth of the child by involving them in various activities in a tension free environment irrespective of their gender, caste, creed, colour etc. To mention a few, the activities are clay modelling, paper machie, music, dance, drama, painting, crafts, museum activities, photography, videography, indoor & outdoor games, home management, traditional aret & craft, educational & innovative games / chess, Science is fun etc. Some of the special attraction of the National Bal Bhavan are Mini Train, Mini Zoo, Fish Corner, Science Park, Funny Mirrors, Culture Craft Village. It has National Training Resource Centre (NTRC) within its premises which imparts training to teachers on diverse activities. The main aim and focus of this resoruce centre is to train the teachers in the all round growth and personality development of children as the teacher's community is well versed with the social, economical, emotional, intellectual and psychological needs of children. The workshop of NTRC also aims to make both teaching and learning a joyful experience for teachers and students respectively.

National Bal Bhavan has also launched a scheme to identify, honour and nurture the creative children of India irrespective of their socio-economic status. The rationale behind this scheme - 'The Bal Shree Scheme', is that creativity is a human potential that directly relates to self expression and self-development. This scheme seeks to identify creative children within the ave group of 9-16 yrs. in four identified areas of creativity i.e. **creative art, craetive performance, creative scientific innovations, creative writing.** This scheme was put into effect in 1995 and since then children have been identified and honoured for their creative elegence in their concerned fields. They have received this honour from either in His Licellency The President of India or the First Lady at a glittering function organised at the Rashtrapati Bhavan.

In addition National Bal Bhavan organises several Local, National and International Programmes viz., Workshops, Trekking, Programmes, Talk Shows, Camps, Obvervance of Various days i.e. earth day, environment day etc. International Children's Assembly, Youth Environmentalist Conference, Education for All, All India Chairperson's and Directors Conference under the able guidance of Ministry of Human Resource Development. Besides, National Bal Bhavan also deputes its children from diffrerent parts of the country to various countries under the Cultural Exchange Programmes and these children act as a young ambassador of the subcontinent's social cultural ethos. Besides, member children of National Bal Bhavan, affiliated Bal Bhavans across the country and member school / institute of National Bal Bhavan also particiapte in Interantional painting competitino on the themes that are of global concern.

NATIONAL COUNCIL FOR TEACHER EDUCATION

The National Council for Teacher Education (NCTE) was established in August 1995 with a view to achieve planned and co-ordinated development of teacher education system throughout the country and for regulation and proper maintenance of norms and standards of teacher education. Some of the major functions of NCTE are laying down norms for various teacher education courses, recognition of teacher education institutions, laying down guidelines in respect of minimum qualifications for appointment of teachers, surveys and studies, research and innovations, prevention of commercialisation of teacher education, etc.

Four Regional Committees of the Council have been set-up at Jaipur, Bangalore, Bhubaneswar and Bhopal for Northern, Southern, Eastern and Western regions respectively. These regional Committees primarily look after recognition of teacher

training institutions in their respective regions and are empowered to grant permission to these institutions to run teacher training courses as per the provisions of the National Council for Teacher Eduction Act. As on 1st January 2007, 7461 teacher training institutions offering 9045 courses have been recognised by NCTE with an approved intake of 7.72 lakh teacher trainees.

RIGHT TO EDCUATION

The Constitution (86th Amendment) Act, 2002, enacted in December 2002 seeks to make free and compulsory education a Fundamental Right for all children in the age-group 6-14 years by inserting a new Article 21-A in Part III ("Fundamental Right") of the Constitution. Article 21A of the Constitution says that :-

"The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine."

The Govt. is committed to facilitate the enactment of an appropriate law that would enable the realization of making education a fundamental right as required by the constitution. Necessary action is being taken a put in place a sitable legislation as envisaged under Acticle 21A of the Constitution.

PRARAMBHIK SHIKSHA KOSH

A two per cent Education Cess was leviedon all major Central taxes through the Finance (No. 2) Act, 2004, to help finance government's committment to quality basic education. In order to receive the proceeds of this Education Cess, the creation of a dedicated, non-lapsable fund called Prarambhik Shiksha Kosh (PSK) in the Public Account was approved by Government on 6-10-2005. Formal orders constituting PSK were issued on 14-11-2005. After presentation of the Union Budget (2006-07) on 28-2-2006, PSK became a separate line item. A provision of Rs. 8746 crores for the initial transfer to the newly created PSK was made in the Union Budget 2006-07 against estimated receipts of Education Cess. Subsequently, in the 3rd batch of Supplementary Demand for Grants, a provision of Rs. 189 crores was made for additional transfer to PSK based on additional estimated collection of education cess of 2% during 2006-07. The funds available in the PSK were utilized exclusively for Sarva Shiksha Abhiyan (SSA) and National programme for Nutritional Support of Primary Education (MDM Scheme). The levy of education cess is a concrete step towards providing assured funding for elementary education.

The NCTE has issued new norms and standards for various teacher training programmes like C.Ed, D.Ed, B.Ed.,DP.Ed, andMP.Ed. The new norm have been introduced to improve the quality of teacher programmes and to strengthen the infrastructural and the facilities in teacher training instittuions.

NATIONAL LITERACY MISSION

The National Literacy Mission set up in May 1988 aims to attain a sustainable threshold level of 75 per cent literacy by 2007 by imparting functional literacy to non-literates in the age group of 15-35 years, which is the productive and reproductive age group and constitutes a major segment of the work force. Apart from pre-determined levels of reading, writing and numeracy with comprehension, functional literacy includes imbibing values of national integration, conservation of environment, women’s equality, observance of small family norms, etc. Literacy, as enunciated in NLM, is not an end in itself but has to be an active and potent instrument of change ensuring achievement of these social objectives and creation of a learning society.

The acquisition of functional literacy results in empowerment and definite improvement in the quality of life.

The **Total Literacy Campaign** is the principal strategy of NLM for eradication of illiteracy. These campaigns are area-specific, time-bound, participative, cost-effective and outcome oriented. These are implemented through Zilla Saksharata Samitis (district level literacy committees) as independent and autonomous bodies, having due representation of all sections of society. Apart from imparting functional literacy, TLC also disseminates a 'basket' of other socially relevant messages such as need for enrolment and retention of children in schools, immunisation, propagation of small family norms, women's equality and empowerment, peace and communal harmony, etc. These literacy campaigns have also generated a demand for primary education. The basic literacy skills acquired by millions of non-literates are at best fragile. There is a greater possibility of neo-literates regressing into partial or total illiteracy unless special efforts are continued to consolidate, sustain and possibly enhance their literacy levels. The first phase of basic literacy instruction and the second phase of consolidation, remediation and skill upgradation are now being treated as one integrated project, to ensure smooth progression from one stage to another to achieve continuity, efficiency and convergence. The National Literacy Mission aims at ensuring that the Total Literacy Campaigns and the Post-literacy Programmes successfully move on to Continuing Education, which provide life-long learning. At present, TLCs are being implemented in 101 districts and PLPs in 168 districts of the country.

The **Continuing Education** Scheme provides a learning continuum to the efforts of Total Literacy and Post Literacy Programmes in the country. The main thrust is on providing further learning opportunities to neo-literates by setting up of Continuing Education Centres (CECs) which provide area-specific, need-based opportunities for basic literacy, upgradation of literacy skills, pursuit of alternative educational programmes, vocational skill and also promote social and occupational development. The scheme also undertakes a number of important programmes such as - Equivalency Programme facilitating the participants to acquire or upgrade their vocational skills and take up income-generating activities; Quality of Life Improvement Programme to equip learners and the community with essential knowledge, attitude, values and skills to raise their standards of living; and Individual Interest Promotion Programme providing opportunities for learners to participate and learn about their individually chosen social, health, physical, cultural, and artistic interests. The programmes of residual illiteracy are also being taken up to address the requirements of geographically remote regions and segments of population requiring special focus, particularly SCs / STs / Women. So far, 328 districts have been covered under the Continuing Education Programme.

Non-Governmental Organisations : The National Literacy Mission (NLM) fully recognises the vast potential of NGOs in furthering its objectives and has taken measures to strengthen its partnership with NGOs and has assigned them an active promotional role in the literacy movement. Apart from imparting literacy, the NGOs provide academic and technical resource support through experimental and innovative programmes.

The State Resource Centres (SRCs) managed by NGOs provide academic and technical resource support in the form of training material preparation, extension activities, innovative projects, research studies and evaluation, etc. At present, there are 26 SRCs.

TABLE 10.1 : PLAN EXPENDITURE ON DIFFERENT SECTORS OF EDUCATION

(in Percentage)

Sector	First Plan Expdt. 1951-56	Second Plan Expdt. 1956-61	Third Plan Expdt. 1961-66	Plan Holiday Expdt. 1966-69	Fourth Plan Expdt. 1969-74	Fifth Plan Expdt. 1974-79	Sixth Plan Expdt. 1980-85	Seventh Plan Expdt. 1985-90	1990-92 Expdt.	Eighth Plan Expdt. 1992-97	Ninth Plan Outlay (1997-2002) (Central Sector)	Ninth Plan Expdty. (1997-02) (Central Sector)	Tenth Plan Outlay (2002-2007) (Central Sector)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Elementary Education	58	35	34	24	50	52	32	37	37	48	66	65.7	65.6
	(870)	(950)	(2010)	(750)	(3743)	(5913)	(8414)	(28494)	(17290)	(103940)	(163696)	(145233)	(287500)
Secondary Education	5	19	18	16	@	@	20	24	22	24	10	10.5	9.9
	(83)	(510)	(1030)	(530)			(5344)	(18315)	(10530)	(52311)	(26035)	(23227)	(43250)
Adult Education					2	2	6	6	9	5	3	2.4	2.9
					(126)	(248)	(1533)	(4696)	(4160)	(11421)	(6304)	(5204)	(12500)
Higher Education	8	18	15	24	25	28	21	16	12	10	10	10.3	9.5
	(117)	(480)	(870)	(770)	(1883)	(3188)	(5604)	(12011)	(5880)	(20944)	(25000)	(22709)	(41765)
Others	15	10	12	11	13	9	11	3	2	3	2	1.6	1.4
	(227)	(300)	(730)	(370)	(936)	(1071)	(2729)	(1980)	(1180)	(7398)	(4314)	(3492)	(6235)
Technical Education	14	18	21	25	10	9	10	14	17	10	9	9.5	10.7
	(215)	(490)	(1250)	(810)	(786)	(1015)	(2563)	(10833)	(8230)	(21987)	(23735)	(21095)	(47000)
Total	100	100	100	100	100	100	100	100	100	100	100	100	100
	(1512)	(2730)	(5890)	(3230)	(7474)	(11435)	(26187)	(76329)	(47270)	(218001)	(249084)	(220960)	(438250)

Source : Five-Year Plan Documents, Planning Commission and Analysis of Budget Expenditure, Ministry of HRD.

Note : 1. Figures in parenthesis in millions of rupees.
2. Figures in col. 2 to col. 11 includes the share of States/UTs.
@ Included under Elementary Education.

Special interventions for Female literacy : As per Census, 2001, 47 districts in the country have a female literacy rate below 30 per cent. Hence, dealing with low female literacy is of immense concern to the National Literacy Mission and it was decided to target the 47 low female literacy districts for improvement. As most of the these districts are concentrated in the States of Uttar Pradesh, Bihar, Orissa and Jharkhand, special innovative programmes have been taken up in these districts for promoting female literacy. The programme in Uttar Pradesh and Bihar has been completed and externally evaluated.

Nine districts in Orissa, which have low female literacy rates, have been covered under Special Project for Accelerated Female Literacy Programme. The programme was assigned to a network of 117 NGOs targeting 10.43 lakh non-literate women in 15-35 age group. The programme is being evaluated by external evaluation agencies.

The special female literacy programme has also been implemented in five low literacy districts of Jharkhand. Around five lakh women illiterates in 15-35 age group have been covered under the programme. The programme has been completed and the external evaluation is awaited from two districts .

Projects for Residual Illiteracy : Although the Total Literacy Campaigns took the form of mass movement and spread throughout the country, in many cases a number of campaigns stagnated due to natural calamites, lack of political will, etc. Despite success of literacy phase, there are still pockets of residual illiteracy and low female literacy. To tackle this problem, Projects for Residual Illiteracy (PRI) have been taken up in 9 Districts of Rajasthan covering about 6.60 lakh learners, 10 districts of Andhra Pradesh covering 22.81 lakh learners, 7 district of Bihar, covering 12.54 lakh learners, 14 districts of Karnataka covering 27.35 lakh learners, 12 districts of Madhya Pradesh covering 7.01 lakh learners, 3 districts of Tripura covering 1.38 lakh learners, 3 district of Jharkhand covering 3.01 lakh learners and 18 districts of Uttar Pradesh covering 36.11 lakh learners, 4 districts of Mizoram covering 0.45 lakh learners, and West Bengal covering 29.54 lakh learners.

Special Literacy Drive : The Council of the NLMA in its meeting held in April 2005 identified 150 districts which have the lowest literacy rates in the country for launching a special literacy drive, with special focus on the minority groups, persons belonging to scheduled castes, scheduled tribes, women and other backward sections of the society by drawing up implementation strategies suited to the specific needs of the group, sections of the society or region. So far, 134 districts in the States of Arunachal Pradesh (7), Andhra Pradesh (8), Bihar (31), Chhattisgarh (2), Jammu & Kashmir (8), Rajasthan (10), Jharkhand (12), Karnataka (2), Madhya Pradesh (9), Meghalaya (3), Nagaland (2), Orissa (8), Punjab (1), Uttar Pradesh (27) and West Bengal (4) have been covered under the Special Literacy drive.

Jan Shikshan Santhan : The objective of the Jan Shikshan Sansthan (JSS) is educational, vocational and occupational development of the socio-economically backward and educationally disadvantaged groups of urban / rural population particularly neo-literates, semi-literates, SCs, STs, women and girls, slum dwellers, migrant workers, etc. At present, there are 172 JSSs in the country. Jan Shikshan Sansthans run a number of vocational programmes with varying duration of different skills. More than 250 types of courses and activities are offered by these institutions. The trades / courses for which training is imparted include cutting, tailoring & dress making; knitting and embroidery; beauty culture and health care; handicrafts; art, drawing and painting; repair of electrical software, etc. In the year 2004-05, 13.91

lakh beneficiaries had been covered under various vocational training programmes, activities and other activities conducted by JSSs, out of which around 65 per cent were women.

Some innovative training programmes and activities that have been taken up by some of the JSS are as under :

- Mentally challenged children in Rourkela trained in Hand Embroidery, Hand Wool Knitting and Water Colours for national level competition.
- Special training organised exclusively for deaf and mute in collaboration with an NGO in Mumbai.
- Vocational Training Programmes organised for the members of the SHG groups in collaboration with DRDA and Panchayat Samitis in Aurangabad.
- Vocational Training for selected SC / ST candidates given in collaboration with Tamil Nadu Adidravida Housing Development Corporation (TAHDO).
- Vocational training given to tribals in collaboration with Forest Department in Coimbatore.
- Vocational Programmes organised for slum dwellers and rural youth sponsored by World Vision in Coimbatore.
- Cluster of families in the tribal settlements of Idduki formed SHGs and organised literacy linked vocational training and then set-up production units and marketed the finished products.
- SGH members trained by Jan Shikshan Sansthan in Sivakasi opened basic electronics unit for repair and maintenance of domestic appliances.
- Vocational courses organised for selected women sponsored by Tamil Nadu Corporation for Development of Women.

Directorate of Adult Education : The Central Directorate of Adult Education provides academic and technical resource support to National Literacy Mission. It has been playing an important role in the development of a network of resource support, particularly production of prototype teaching / learning materials / media software and harnessing of all kinds of media for realising the objectives of NLM.

40th International Literacy Day celebration was held at Vigyan Bhawan, New Delhi on 8th, 2006. The Chief Guest for the function was His Excellency Shri Bhairon Singh Shekhwat, Vice President of India. NLM-UNESCO Awards are given every year in the national function to the selected StateResource Centre, Jan Shikshan Sansthan and University, Department of Adult, Continuning Education and Extension for their outstanding work done in the field of adult and literacy programmes. The award winners were : 1) State Resource Centre, Kolkata 2) Jan Shikshan Sansthan Aurangabad and 3) Department of Continuing Education & Extension, S.V. University, Tirupati.

Satyen Maitra Memorial Award is given every year to selected TLC / PLP / CE districts for their best performing and significant achievements in literacy programmes. The awards for 2006 went to Changlang, Arunachal Pradesh (TLC), Hanumangarh, Rajasthan (PLP), Cuddapah, Andhra Pradesh (CEP), Kollam, Kerala (CEP) Toothukudi, Tamil Nadu (CEP)

UNESCO's Confucious Prize for Literacy has been awarded to Directorate of Literacy & Continuing Education, Goverment of Rajasthan for its Useful Learning through Literacy and Continuing Education Programme in Rajasthan. The award

carries a cash award of US $ 20,000 and a citation. The theme for award for this year was "Literacy for Sustainable Development". The Directorate of Literacy & Continuing Education of Rajasthan received this award for this literacy programmes specifically targeted at illiterate women.

The State of Rajasthan has undertaken specific initiatives under which the illiterate women were taught IPCL primers and after completion of Primer-III at CE Centres, 15 day special vocational training camps were organized for them in all the districts. Self-Help Groups for neo-literate women have been organized and facilities for marketing the goods prepared by them have also been arranged. The objective was to make the women economically self-sufficient. A Project for Residual illiteracy has also been taken up in 30 districts of the State for the benefit of nearly 10 lakh illiterate persons.

Publication : Publciation Unit of Directorate of Adult Edcuation brought various kinds of publications related to literacy and Adult Education during 2006-07. The books published were in different languages for neo-literates; Guidelines on different aspects of the literacy programmes (Basic Literacy, Post Literacy and Continuing education) for neo-literates; Policy guidelines, annual reports, statistical data books etc. for academicianis and social sciences researchers; Special publications for important occasions such as International Literacy Day celebrations and national / international level workshops etc.

Throughout the year a good number of publications were brought out and other associated works like photo-documentation, design artwork making of publications and dispatch of printed materials were carried out. Many publications were distributed free of cost to various levels of users in the country.

On the occasion of the International Literacy Day on 8th September, 2006, Special publication titled "Innovations in Literacy" was released by Vice President of India and a set of 8 books for neo-literates was also presented to the Vice-President.

Evaluation : 393 Total Literacy Campaign districts and 172 Post Literacy Programme districts have been evaluated by the External Evaluation Agencies. Seven Continuing Education Programme districts, i.e., Mandi (Himachal Pradesh), Ajmer (Rajasthan), Idduki Kasargod and Kollam and (Kerala) Uttar Kammad and Davangere (Karnataka) have also been evaluated by external evaluation agencies. Similarly, the activities of 106 JSSs have also been evaluated. Some of the agencies, which conducted evaluation of these programmes, include Indian Institute of Management, Bangalore, XLRI, Jamshedpur, Management Development Institute, Gurgaon, Tata Consultancy Services, Mumbai, Media Research Group, New Delhi, etc.

- The literacy rate in 2001 has been recorded at 64.84 per cent as against 52.21 per cent in 1991. The 12.63 percentage points increase in the literacy rate during the period is the highest increase in any decade.
- 124.27 million persons made literate so far.
- Rate of growth in literacy is more in rural areas than in urban areas.
- The gap in male-female literacy rate has decreased from 24.84 per cent in 1991 to 21.60 per cent in 2001.
- Female literacy increased by 14.38 per cent i.e. from 39.29 per cent to 53.67 per cent whereas male literacy increased by 11.13 per cent i.e. from 64.13 per cent to 75.26 per cent during the last decade.

- Gender equity and women's empowerment is also visible as about 60 per cent of participants and beneficiaries are women.
- The population in 7+ age group increased by 171.6 millions while 203.6 million additional persons became literate during 1991-2001.
- All the States and union territories without exception have shown increase in literacy rates during 1991-2001.
- In all states and union territories, the male literacy rate is now over 60 per cent. Kerala continues to have the highest literacy rate of 90.92 per cent and Bihar has the lowest literacy rate of 47.53 per cent.
- Significant decline in absolute number of non-literates from 328.88 million in 1991 to 304 million in 2001.
- Out of the total 600 districts in the country, 597 districts have been covered by NLM under literacy programme.

EDUCATION OF SCHEDULED CASTES AND SCHEDULED TRIBES

Constitutional provisions : Article 46 of the Constitution states that, ''The State shall promote, with special care, the education and economic interests of the weaker sections of the people, and, in particular of the Scheduled Castes and Scheduled Tribes, and shall protect them from social injustice and all forms of social exploitation". Articles 330, 332, 335, 338 to 342 and the entire Fifth and Sixth Schedules of the Constitution deal with special provisions for implementation of the objectives set forth in Article 46. These provisions need to be fully utilised for the benefit of these weaker sections in our society.

Commitment in NCMP : The UPA government has set six basic principles for governance. One of them is **"To provide for full equality of opportunity, particularly in education and employment for scheduled castes, scheduled tribes, OBCs and religious minorities''.** Besides, the National Common Minimum Programme (NCMP) of the UPA Government contains following provisions aimed at the welfare and empowerment of these communities : (a) UPA Government will take immediate steps to reverse the trend of communalisation of education that had set in the past five-years. (b) Steps will be taken to remove the communalisation of the school syllabus that has taken place in the past five-years. A review committee of experts will be set up for this purpose. (c) The UPA will ensure that nobody is denied professional education because he or she is poor. (d) All reservation quotas, including those relating to promotions, will be fulfilled in a time bound manner. To codify all reservations, a Reservation Act will be enacted. (e) The UPA Government is very sensitive to the issue of affirmative action, including reservations, in the private sector.

Special provisions : After independence, the Government of India has taken number of steps to strengthen the educational base of the persons belonging to the Scheduled Castes and Scheduled Tribes. Pursuant to the National Policy on Education-1986 and the Programme of Action (POA)-1992, the following special provisions for SCs and STs have been incorporated in the existing schemes of the Departments of Elementary Education and Literacy and Secondary and Higher Education : (a) relaxed norms for opening of primary / middle schools; a primary school within one km walking distance from habitations of population upto 200 instead of habitations of upto 300 population. (b) Abolition of tuition fee in all States in Government Schools at least upto the upper primary level. In fact, most of the states have abolished tuition

fees for SC / ST students up to the senior secondary level. (c) Incentives like free textbooks, uniforms, stationery, schools bags, etc., for these students. (d) The **Constitutional (86th Amendment) Bill,** notified on 13 December 2002, provides for free and compulsory elementary education as a Fundamental Right, for all children in the age group of 6-14 years. (e) **Sarva Shiksha Abhiyan (SSA) :** SSA is a historic stride towards achieving the long cherished goal of Universalisation of Elementary Education (UEE) through a time bound integrated approach, in partnership with States. SSA, which promises to change the face of elementary education sector of the country, aims to provide useful and quality elementary education to all children in the 6-14 age group by 2010. The main features of the programme are : (i) Focus on girls, especially belonging to SC / ST communities and minority groups. (ii) Back to school campus for out of school girls. (iii) Free textbooks for girls. (iv) Special coaching remedial classes for girls and a congenial learning environment. (v) Teachers' sensitisation programmes to promote equitable learning opportunities. (vi) Special focus for innovative projects related to girls education. (vii) Recruitment of 50 per cent female teachers.

District Primary Education Programme (DPEP) : The thrust of the scheme is on disadvantaged groups like girls, SCs / STs, working children, urban deprived children, disabled children, etc. There are specific strategies for girls and SCs / STs; however, physical targets are fixed, in an integrated manner including coverage of these groups as well. According to a study by NIEPA, schools in DPEP districts had more than 60 per cent students belonging to SC / ST communities.

Mahila Samakhya (MS) : MS addresses traditional gender imbalances in educational access and achievement. This involves enabling women (especially from socially and economically disadvantaged and marginalised groups) to address and deal with problems of isolation and lack of self-confidence, oppressive social customs and struggle for survival, all of which inhibit their empowerment.

National Programme for Education of Girls at Elementary Level (NPEGEL): The NPEGEL under the existing scheme of Sarva Shiksha Abhiyan (SSA) provides additional components for education of girls under privileged / disadvantaged at the elementary level. The Scheme is being implemented in Educationally Backward Blocks (EBBs) where the level of rural female literacy is less than the national average and the gender gap is above the national average, as well as in blocks of districts that have at least 5 per cent SC / ST population and where SC / ST female literacy is below 10 per cent based on 1991.

Shiksha Karmi Project (SKP) : SKP aims at universalisation and qualitative improvement of primary education in remote, arid and socio-economically backward villages in Rajasthan with primary attention to girls. It is noteworthy that in Shiksha Karmi Schools, most of the students are from SCs, STs and OBCs.

Kasturba Gandhi Balika Vidyalayas : Under the scheme of Kasturba Gandhi Balika Vidyalaya, 750 residential schools are being set up in difficult areas with boarding facilities at elementary level for girls belonging predominantly to the SC, ST, OBC and minorities. The scheme would be applicable only in those identified Educationally Backward Blocks (EBBs) where, as per census data 2001, the rural female literacy is below the national average and gender gap in literacy is more than the national average. Among these blocks, schools may be set up in areas with concentration of tribal population, with low female literacy and / or a large number of girls out of school.

Jan Shikshan Sansthan (JSS) : The Scheme of JSS or Institute of People's Education is a polyvalent or multifaceted adult education programme aimed at improving the vocational skill and quality of life of the beneficiaries. The objective of the scheme is education, vocational and occupational development of the socio-economically backward and educationally disadvantaged groups of urban / rural population particularly neo-literates, semi-illiterates, SCs, STs, women and girls, slum dwellers, migrant workers, etc.

Literacy campaigns have had an enormous impact on other social sectors. The campaigns have served the cause of promoting equity and social justice in society and fostering of a scientific temper and a sense of belonging to India's great composite culture and consciousness of unity in diversity.

Mid-Day Meal scheme : The Mid-Day Meal scheme is a successful incentive programme. It covers all students of primary classes in all government, local body and government aided schools in the country with the aim to improve enrolment, attendance and retention while simultaneously impacting on the nutritional status of the children.

Central Institute of Indian Languages (CIIL) : The Central Institute of Indian Languages, Mysore has a scheme of development of Indian Languages through research, developing manpower and production of materials in modern Indian Languages including tribal languages. The Institute has worked in more than 90 tribal and border languages.

Kendriya Vidyalayas (KVs) : 15 per cent and 7.5 per cent seats are reserved for SCs and STs respectively in fresh admissions. No tuition fee is charged from scheduled Caste and Scheduled Tribe students up to class XII.

Navodaya Vidyalayas (NVs) : Reservation of seats in favour of children belonging to SCs and STs is provided in proportion to their population in the concerned district provided that no such reservation will be less than the national average of 22.5 per cent (15 per cent for SCs and 7.50 per cent for STs) and a maximum of 50 per cent for both the categories (SCs & STs) taken together. These reservations are interchangeable and over and above the students selected under open merit.

National Institute of Open Schooling (NIOS)

Concession in fee to SC / ST candidates

The SC / ST students are given concession in admission fees to the extent of Rs. 450 / - for Secondary Courses and Rs. 525 / - for Senior Secondary Courses.

Scholarship Scheme for SC / ST candidates

Dr. Ambedkar National Scholarship Scheme for meritoriious students, is implemnted by Dr. Ambedkar Foundation set up under the aegis of the Ministry of Social Justice and Empowerment in 1992 with a view to recognize, promote and assist meritorious students belonging to Scheduled Caste and Scheduled Tribe for enabling them to pursue higher studies. This is one time cash award and will be given to three students scoring highest marks in the regular class X level examination conducted by the Education Board / Council. This will be separate for SC and ST. In case none of the first three eligible students are girls, the girl students scoring the highest mark will get a special award.

As and when asked by the Ministry of Social Welfare and Justice, NIOS is supposed to send the names of eligible candidates for this scheme.

Under the Scheme of **strengthening of Boarding and Hostel Facilities for Girl Students of Secondary and Higher Secondary Schools** cent percent financial assistance is given to Voluntary Organisations to improve enrolment of adolescent girls belonging to rural areas and weaker sections. Preference is given to educationally backward districts particularly those predominately inhabited by SCs / STs and educationally backward minorities.

Out of 43,000 scholarships at the secondary stage for talented children from rural areas 13,000 scholarships are awarded to SC / ST students subject to fulfillment of criteria laid down.

National Council for Educational Research and Training (NCERT) : NCERT focuses on the development of textbooks, teacher guides, supplementary reading materials, evaluation of textbooks, vocational education, educational technology, examination reforms, support to Sarva Shiksha Abhiyan, education of educationally disadvantaged groups.

NCERT operates the National Talent Search Scheme for pursuing courses in science and social science upto doctoral level and in professional courses like medicine and engineering upto second-degree level subject to fulfillment of the conditions. Out of 1000 scholarships, 150 scholarships are reserved for SC students and 75 scholarships for ST students.

National Institute of Educational Planning and Administration (NIEPA) : Educational development of Scheduled Castes and Scheduled Tribes is an area of major concern of NIEPA. It carries out a number of studies relating to educational programmes and schemes for scheduled castes and scheduled tribes. It has also been generating material relating to educational institutions and development of Scheduled Caste and Scheduled Tribe students.

University Grants Commission (UGC) : UGC provides financial assistance to universities / deemed universities for the establishment of SC / ST cells in Universities to ensure effective implementation of reservation policy for SCs and STs. The UGC has established SC / ST Cells in 113 Universities including Central Universities to ensure proper implementation of the reservation policy. The Standing Committee on SCs / STs monitors and reviews the work undertaken by the universities / colleges.

As per the reservation policy, UGC has earmarked 15 per cent and 7.50 per cent reservation for SCs and STs respectively in appointments, both in teaching and non-teaching posts, admissions, hostel accommodation, etc., in universities / colleges, professional and technical educational institutions administered by the Central Government. State universities follow reservation policy as prescribed by respective state governments. The commission has been issuing guidelines / directives / instructions from time to time for implementing reservation policy of the Government of India. Apart from reservation, there is also relaxation in the minimum quaifying marks for admission for SC / ST candidates

UGC has been implementing the programme of Career Orientation to education (vocationalsation of education) to ensure that the graduates have knowledge, skills and attitudes for gainful employment in the wage sector in general, and self-employment in particular for all including SCs / STs. It also provides financial assistance for Remedial Coaching to SC / ST students. It provides financial assistance to the existing coaching centres to prepare SC / ST candidates for the National Eligibility Test (NET) conducted by UGC / CSIR. The Commission provides financial

assistance for extension activities. Under the scheme, all groups of the society are covered including SCs / STs.

In order to contribute towards social equity and socio-economic mobility of the under privileged sections of the society, UGC has introduced remedial coaching scheme at UG / PG level. The main objectives of the scheme are: (i) to improve the academic skills and linguistic proficiency of the students in various subjects. (ii) To raise the level of comprehension of basic subjects so as to provide a strong foundation for further academic work. (iii) To strengthen their knowledge, skills and attitudes in the subjects where quantitative and qualitative techniques and laboratory work are involved and (iv) To improve the overall performance of these students in the examination.

The Commission has created a Central Pool Database of eligible SC / ST candidates and recommends their candidature for teaching positions in order to fulfill the prescribed reservation quota in universities and colleges.

Periodic meetings of Registrars of Central Universities are organised to review the implementation of reservation policy in the Central Universities. A Special Monitoring Committee reviews the functioning of existing Cells.

Community Polytechnics : The Scheme of Community Polytechnics undertakes rural / community development activities through application of science and technology in its proximity. It provides platforms for transfer of appropriate technologies to rural masses local communities. Preference is given in training to rural youths, SCs, STs, women, school dropouts and other disadvantaged groups and helps them to obtain need based gainful employment. The scheme of Community Polytechnics has been in operation in selected diploma level institutions since 1978-79. It applies science and technology through skill oriented non-formal training technology transfer and technical support services.

Engineering Colleges : The higher educational institutions administered by the Central Government including IITs, IIMs, National Institutes of Technology etc., provide reservation to the extent of 15 per cent and 7.5 per cent for SC and ST students respectively. Apart from reservation, there is also relaxation in the minimum qualifying marks for admission for SC / ST students. Seats are also reserved in hostels. However, in institutions run by the State Governments, the reservation percentage varies as per the State Government's policy.

SCP & TSP : From the allotted budgets of the Departments of Elementary Education and Literacy and Secondary and Higher Education, 16.20 and 8 per cent are allocated under the Special Component Plan (SCP) and the Tribal Sub-Plan (TSP) for Scheduled Castes and Scheduled Tribes respectively. The Department of Secondary and Higher Education has earmarked notionally Rs 333.75 crore and 166.88 crore for SCP and TSP respectively out of the plan outlay of Rs 2225 crore for Annual Plan 2004-05. Department of Elementary Education and Literacy has earmarked notionally Rs 900 crore and 450 crore for SCP and TSP respectively out of the plan outlay of Rs 6000 crore for Annual Plan 2004-05.

Literacy Rates : Adult Literacy Schemes of the National Literacy Mission have been implemented in nearly all the districts of the country. Special measures have been initiated to improve female literacy in low female literacy districts (45) through focussed interventions by Zilla Saksharata Samitis, Non-government Organisations, women volunteer teachers and Panchayati Raj functionaries. Emphasis is also being laid on provision of life-long learning opportunities, imparting vocational skills, and

improving income generation of neo-literates through the Continuing Education Programme, which is being implemented in 272 districts.

The achievements made in the literacy rates of Scheduled Castes and Scheduled Tribes are also significant compared to those in the 1991 Census, i.e., 37.41 per cent and 29.41 per cent respectively. Besides, the growth in female literacy amongst the Scheduled Castes and Scheduled Tribes is also at a faster rate as compared to male literacy figures.

QUALITY IMPROVEMENT IN SCHOOLS

During the 10th Five Year Plan, ‘‘Quality Improvement in Schools’’ was introduced as a composite centrally sponsored scheme having the following components : (i) National Population Education Project, (ii) Environmental Orientation to School Education, (iii) Improvement of Science Education in Schools, and (iv) Introduction of Yoga in Schools and (v) International Science olympiads. A decision was taken to transfer four of these components to National Council of Educational Research and Training (NCERT) w.e.f. April 2006, except the component of improvement Science Education in school that was transferred to states.

The 10th plan outlay for this scheme is Rs 115 crore. A budgetary provision of Rs 7 crore was made for the year 2006-07 for four components that have been transferred to National Counciil of Educational Research and Training.

NATIONAL POPULATION EDUCATION PROJECT

National Population Education Project was launchedin April 1980 with the overarching objective of institutionalizing population education in the school education and teacher education systems to contribute to the attainment of population and development goals of the country. Up to 2002, this was implemented as externally aided Project which was fully funded by the United Nations Population Fund (UNFPA). It was being implemented in the University education and adult education sector as well. In view of the achievements and significance of the Project, Government of India decided to continue to in the X Five Year Plan with a more focused objective of integrting the elements of reconceptualised framework of population education in school curriculum.

Moreover, UNFPA decided to support a concomitant Project focused on adolescent reproductive and sexual health (ARSH) from 2004. For that a budgetary allocation of 7.29 crore has been made for the period 2004-2007. During 2006-07, the NPEP was implemented as an integral part of Adolescence Education Programme, launched by Ministry of Human Resoruce Development in 2005 in collaboration with National AIDS Control Organisation (NACO).

ENVIRONMENTAL ORIENTATION TO SCHOOL EDUCATION

The National Policy on Education (NPE)-1986 provides that the protection of environment is a value which, along with certain other values, must form an integral part of curricula at all stages of education. To operationalise this noble objective, the mind and intellect of the students must be sensitised to the hazards inherent in nature upsetting the ecological balance in nature. This step inculcates awareness and respect among students for basic concepts relating to the conservation of environment.

To this end, a Centrally-sponsored Scheme ‘‘Environment Orientation to School Education’’ was initiated in 1988-89. The scheme envisages assistance to voluntary

agencies for conduct of experimental and innovative programmes aimed at promoting integration of educational programmes in schools with local environmental conditions. During the year 2006-2007, voluntary organisations were provided financial assistance to the extent of Rs. 90 lakh for undertaking innovative and experimental projects in the field of environmental education.

IMPROVEMENT OF SCIENCE EDUCATION IN SCHOOLS

To improve the quality of science education and to promote the scientific temper. As envisaged in the National Policy on Education, 1986, a Centrally sponsored Scheme; ''Improvement of Science Education in Schools'' was initiated during 1987-88. Under the scheme financial assistance was being provided to States / UTs and voluntary agencies. While voluntary agencies were provided assistance for conducting experimental and innovative programmes States / Union Territories were assisted for provision of science kits to Upper Primary Schools, setting up / upgradation of science laboratories in Secondary / Senior Secondary, Schools, Library facilities in Secondary / Senior Secondary Schools and Training of Science and Mathematics teachers.

One of the important components of this scheme was participation of Indian Students at school level in the International Science Olympiads, viz., International Mathematical Olympiad (since 1989), International Physics Olympiad (since 1998), International Chemistry Olympiad (since 1999) and International Biology Olympiad (since 2000).

INTRODUCTION OF YOGA IN SCHOOLS

Introduction of Yoga in Schools was launcehd as a Centrally Sponsored Scheme during 1989-90 to provide finanical assistance to States / Union Territories / Non-Governmental Organisations. It aimed at giving central assistance for training and research, enrichment of library and construction / expansion of hostels for teacher trainees. It was being implemented through the concerned Departments of Education of States / UTs. It was transferred to NCERT w.e.f. april 2007. NCERT has initiated to review the Scheme in the light of National Curriculum Framework 2005.

During 2006-07, financial assistance (both non-plan and plan) has been provided to NGOs. An amount of Rs. 65 lakh has been given as non-plan grant to one agency and Rs. 26,38,000 to 13 agencies for conducting training and library related activities.

INTERNATIONAL SCIENCE OLYMPIADS

With an aim to identify and nurture talents in Mathematics, Physics, Chemistry and Biology at school level, and International Mathematical Olympiad (IMO), International Physics Olympiad (IPhO), International Chemistry Olympiad (IChO) and International Biology Olympiad (IBO) are held every year. India has been participating in these Olympiads since 1989, 1998, 1999 and 2000, respectively. Each participating country is required to send a team comprising not more than 6 sceondary students contestants to IMO, 5 secondary student contestants at IPhO, 4 contestants to IChO and 4 contestants to IBO apart from a Team Leader and a Deputy Team Leader. Since 2002 Indian team is also particiapting in international Olympiad in informatics.

As per the exiting financial pattern, the host country pay for the boarding and loding and transportation of teams during their stay in the nest country, while the International travel cost is borne by the participating countries. The Indian teams in the last Olympiads were jointly sponsored by the Department of Secondary and

Bhabha Centre for Sciecne Education (HBCSE) / Bangalore Association for Science Education (BASE) / Indian Association for Research in Computing Science (IARCS) and Central Board of Secondary Education (CBSE). The cost of international travel is paid by the Department of Secondary and Higher Education while all other expenses on selection of students internal travel incidental borne by NBHM / HBCSE / IARCS.

At IChO-2005 held at Taipei, Taiwan during July 2005 the Indian Team won 3 silver and 1 Bronze medals. At IPhO-2005 held at Salamanca, Spain during july 2005, the Indian team won 2 gold, 2 silver and 1 bronze medals. At IBO 2005 held at Beijing, China during July 2005 the Indian Team won 1 gold and 3 bronze medals. At IMO-2005 held at Menda, Mexico in July 2005, the Indian Team won 1 silver and 1 bronze medals and 3 honorable mentions. India had also participated in Interatnational Olympiad in Informatics (IOI-2005) held in Nowy Sacz, Poland during August 2005.

At IPhO-2006 held at Singapore from July 8-17, 2006 the Indian team won two gold and three bronze medals. At IChO-2006 held at Gyeongsangbuk, Korea from July 2-12, 2006 and Indian team won one gold, two silver and one bronze medals. In the IMO-2006 held at Lublijana, Slovenia from July 6-18, 2006 the Indian team won five bronze medals and one honourable mention. At IBO-2006 held at Jordoba, Argentina from July 9-16, 2006 the Indian team won three silver and a bronze medal.

NAVODAYA VIDYALAYA SAMITI

The National Policy on Education – 1986 envisaged setting up of model school, one in each district of the Country. Accordingly, a scheme was formulated under which it was decided to set-up co-educational residential schools (now called Jawahar Navodaya Vidyalayas).

Navodaya Vidyalayas are fully residential co-educational institutions providing education up to senior secondary stage. The scheme, which started with only two schools on experimental basis in 1985-86, has grown to 565 schools (as on 31 March 2007) covering as many districts in 34 States / UTs, with over 1.93 lakh students on rolls as on 31 March 2007. More than 30,000 new students are admitted every year.

The Vidyalayas envisaged a new style of growth with identification and development of talented, bright and gifted children predominantly from rural areas who may otherwise be denied good educational opportunities. Efforts are made to ensure that at least 33 per cent of the students enrolled are girls.

Migration is a unique feature of Navodaya Vidyalaya scheme whereby 30 per cent of students of Class IX from a Vidyalaya located in Hindi speaking area spend one academic year in a Vidyalaya located in Non-Hindi speaking area and vice-versa to promote national integration through understanding of the diversity and plurality of country’s people, their language and culture.

KENDRIYA VIDYALAYA SANGATHAN

The Government approved the scheme of Kendriya Vidyalaya Sangathan in 1962, on the recommendations of the Second Pay Commission. Initially, 20 regimental schools in different States were taken over as Central Schools. In 1965, an Autonomous Body called Kendriya Vidyalaya Sangathan was established with the primary objective of setting-up and monitoring Kendriya Vidyalaya to cater to the educational needs of the children of transferable Central Government Employees including Defence Personnel and Para-Military forces by providing common programme of education.

At present, there are 931 Kendriya Vidyalayas (as on 17 June 2005) out of which three Kendriya Vidyalayas are abroad i.e., one each in Kathmandu, Moscow and Tehran. All Kendriya Vidyalayas follow a uniform syllabus.

INTEGRATED EDUCATION FOR DISABLED CHILDREN

The Centrally sponsored scheme of Integrated Education for Disabled Children (IEDC) was launched in 1974 by the then Department of Social Welfare and was later transferred to the Department of Education in 1982-83. The Scheme was last revised in 1992. The Scheme provides educational opportunities for disabled children in common schools to facilitate their integration and ultimate retention in the general school system. Under IEDC, 100 per cent assistance is being provided under various components for education of children suffering from mild to moderate disabilities in common schools. The components include educational aids, supporting equipments, salaries for special teachers and facilities for children with disability.

By the end of 2005, a total of approximately 2 lakh disabled children have been covered in nearly 85,000 schools. The total budgetary provision during the Tenth Plan is Rs. 200 crore and during the year 2005-06, Rs. 45 crore has been allocated for the implementation of the scheme.

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

The National Council of Educational Research and Training (NCERT) is an apex institution which provides technical resource support for school education. The NCERT charter envisages a special place for designing curriculum. NCERT is expected to review school curriculum as a regular activity ensuring the higher standards in education. The National Policy of Education, (NPE) 1986, and the Programme of Action (PoA), 1992 assign a special role to NCERT in preparing and promoting a National Curriculum Framework. The NPE views such a task as a means of establishing a national system of education, charaterised by certain core values and goals relevant to changing needs of children and society and within the constitutional framework of the country.

National Curriculum Framework : The National Curriculum Framework (NCF) 2005 was the outcome of wide ranging deliberations and collective endeavours. A National Steering Committee was set up under the chairpersonship of Prof. Yash Pal, eminent scientist and scholar. The committee comprised 35 members including scholars from different disciplines, principals and teachers, representatives of well-known NGOs and members of the NCERT. Its work was supported by 21 National Focus Groups, covering major areas of the curriculum, national concerns and systemic issues. Consultations were held across the length and breadth of the country. In addition, NCERT held consultations with rural teachers, State Education Secretaries and Principals of private schools. Regional seminars were organised at the Regional Institutes of Education in Ajmer, Bhopal, Bhubaneswar, Mysore and Shillong.

PROMOTION OF LANGUAGES

Language being the most important medium of communication and education, its development occupies an important place in the 'National Policy on Education and Programme of Action. Therefore, the promotion and development of Hindi and other Languages listed in the Constitution of India have received due attention.

HINDI

In order to assist non-Hindi speaking States / UTs to effectively implement the three-language formula, support for teaching of Hindi in these States / UTs is provided by

sanctioning financial assistance to appoint Hindi teachers in schools under a Centrally-sponsored scheme. Assistance is also given to Voluntary Organisations for enabling them to hold Hindi-teaching classes. Through the Kendriya Hindi Sansthan, the Government promotes development of improved methodology for teaching Hindi to non-Hindi speaking students. A special course for teaching Hindi to foreigners is being conducted by the Sansthan, on regular basis annually.

The Central Hindi Directorate runs programmes relating to purchase and publication of books and its free distribution to non-Hindi speaking States and to Indian missions. It extends financial support to NGOs engaged in development and promotion of Hindi.

The Commission for Scientific and Technical Terminology, New Delhi, prepares and publishes definition dictionaries and terminology in various disciplines in Hindi and in other languages,

MODERN INDIAN LANGUAGES

Financial assistance is given to voluntary organisations and individuals to bring out publications like encyclopedias, dictionaries, books of knowledge, original writing on linguistics, literacy, ideological, social anthropological and cultural themes, critical edition of old manuscripts, etc., for the development of Modern Indian Languages. States are given special help for the production of University-level books in regional languages. The National Council for Promotion of Urdu Language (NCPUL) has been functioning since April 1996 as an autonomous body for the promotion of Urdu language and also Arabic and Persian languages. One of the outstanding areas of operation of NCPUL has been transfer of information of Urdu speaking population into productive human resource and making them part of the employable technological workforce in the emerging information technological scenario and penetration of computer education to the grass-root level in minority concentration blocks. The Government has also set-up National Council for Promotion of Sindhi.

The Government also provides facilities for study of all Indian languages. For this the Central Institute of Indian Languages (CIIL), Mysore conducts research in the areas of language analysis, languages, pedagogy, language technology and language use. It runs Regional Language Centres to help in meeting the demand for training of teachers to implement the three-language formula. The Regional Language Centre also provides training for mother- tongue teachers in different Indian languages at various levels.]

ENGLISH AND FOREIGN LANGUAGES

The Central Institute of English and Foreign Languages (CIEFL), Hyderbad is an Institution of Higher learning deemed to be a University is an autonomous organisation under this Ministry, which undertakes teacher education programme to improve the professional competence of teachers of English at the secondary language. It offers several courses like post-graduate certificate and diploma courses in teaching of English and Ph.D courses in English through the distance mode. It also offers teaching of major foreign languages like Arabic, French, German, Japanese, Russian and Spanish. It has regional centres at Shillong and Lucknow. The CIEFL also implements two Government of India schemes of English Language Teaching Institute (ELTI) and District Centres for English to bring about substantial improvements in the standard of teaching / learning of English in the country for which grants are given by CIEFL to various State Governments.

STRENGTHENING OF CULTURE AND VALUES IN EDUCATION

The National Policy on Education, 1986 (revised in 1992) and its Programme of Action-1992 has laid considerable emphasis on value education by highlighting the need to make education a forceful tool for social and moral values.

To fulfill the objectives of the National Policy on Education, a Central Sector Scheme of Assistance for Strengthening of Culture and Values in Education is being implemented. Under this Scheme, financial assistance is given to Governmental and non-Governmental organisations, Panchayati Raj Institutions, etc., to the extent of 100 per cent of grant for the project proposals approved subject to a ceiling of Rs. ten lakh for strengthening cultural and value education from pre-primary education system to higher education including technical and management education.

SANSKRIT DIVISION

Sanskrit has played a vital role in the development of all Indian Languages and in the preservation of the cultural heritage of India. The Government of India gives 100 per cent financial assistance through State Governments for: a) Eminent Sanskrit scholars in Indigent Circumstances; b) Modernisation of Sanskrit Pathshalas ; c) Providing facilities for teaching Sanskrit in High / Higher Secondary Schools; d) Scholarships to students studying Sanskrit in High and Higher Secondary schools; e) Various schemes for the promotion of Sanskrit; and f) improving the methodology of teaching Sanskrit in schools, Sanskrit Colleges / Vidyapeeths. Presently the Scheme is under revision.

Presidential Award of the Certificate of Honour is conferred on eminent scholars of Sanskrit, Pali, Arabic, and Persian in recognition of their lifetime outstanding contribution towards the propagation of these languages, every year on Independence Day. Maharshi Badrayan Vyas Samman has also been introduced for young scholars in the age group of 30-40 years who have made a break through in inter disciplinary studies involving contribution of Sanskrit or ancient Indian wisdom, to the process of synergy between modernity and tradition,

The Maharshi Sandipani Rashtriya Veda Vidya Prathisthan, Ujjain is an autonomous organisation, which promotes. a) Preservation, conservation and development of the oral tradition of Vedic studies; b) Study of the Vedas through Pathashalas as well as through other means and institutions; c) Creation and promotion of research facilities; d) Creation of infrastructure and other conditions for the collection of information and storage of relevant material.

Rashtriya Sanskrit Sansthan, New Delhi is an autonomous organisation established by the Government of India in the year 1970. It is the nodal agency for the propagation, promotion and development of Sanskrit Education in the country. It is fully funded by the Government of India in the Ministry of Human Resource Development, Department of Secondary and Higher Education. Rashtriya Sanskrit Sansthan has been granted the status of a Deemed to be University.

Rashtriya Sanskrit Vidyapeetha, Tirupati, provides courses of study from Prak Shasti (Intermediate) to Vidya Vardhi (Ph.D.) , The Vidyapeetha has upgraded the Department of Pedagogy to an Institute of Advanced Studies in Education (IASE).

Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi provides courses of study from Shastri to Vidya Vachaspati (D.Lit.). From 1997-98 the Vidyapeetha started diploma in vedic and refresher courses, two degrees, namely,

Vidya Vardhi (Ph.D) and Manad Upaadhi (Honorary D.Lit.) are also given by Vidyapeetha.

SCHOLARSHIPS

The Ministry of Human Resource Development operates a Centrally Sponsored Plan Scheme viz., National Merit Scholarship Scheme through States / UTs, under which 100 per cent financial assistance is provided to meritorious students from rural areas studying in classes IX and X. Besides, scholarship is also provided to all the meritorious students on state-wise merit, including students from rural areas, studying from the post-metric to the post-graduate level. The rate of scholarship varies from Rs 250 to Rs 750, depending on course of study. Under the Scheme of Scholarship to Students from Non-Hindi Speaking States for Post-Matric Studies in Hindi, the rate of scholarship ranges from Rs 300 to 1000 per month.

The Government provides scholarships to Indian scholar for Post Graduate / Research / Post Doctoral studies abroad on the basis of offers received from foreign Government under the various Cultural / Educational Exchange Programme. The details of offers and other conditions are given wide publicity in the leading newspapers while inviting applications for scholarship and are available on Department's website www.education.nic.in. The amount and other facilities provided by foreign governments varies from country to country and time to time.

EDUCATIONAL DEVELOPMENT IN NORTH EASTERN REGION

The NE Region comprising eight States has a high literacy level and is rich in ethnic cultural heritage with linguistic diversity. However, the region lacks infrastructure and facilities in educational institutions across sectors and there is a need to improve the quality of education imparted. The NE States have been provided grants under the Non Lapsable Central Pool of Resources (NLCPR) to improve their infrastructure facilities. The Empowered Committee administering NLCPR has, since its inception in 1998-99, approved proposals worth Rs 480.68 crore for the development of educational infrastructure in the NER. Funds amounting to Rs 392.81 crore have also been released as on 30 November 2005. Out of this, Rs 14.84 crore was released in 2005-06.

In the Central sector, the proposals mainly relate to infrastructure development of Central Institutions like the five central universities in the North East which include construction of staff quarters, academic buildings, library buildings, administrative buildings and purchase of lab equipments, books, etc. These projects are in various stages of implementation. The important Central Sector Institutions in the North East Region are IIT, Guwahati; NERIST, Itanagar; NIT, Silchar; Regional Centres of IGNOU; Central Universities of Assam, Tezpur, Mizoram, Nagaland and NEHU.

In addition to the funds released under NLCPR, the Department of Secondary and Higher Education also released Rs 40.42 crore during 2003-04 from its own budget for meeting the committed liability under NLCPR for infrastructure projects of Assam University, Tezpur University, NEHU and JNU (for NER students' hostel).

A provision of Rs 261.05 crore and Rs 1053 crore has been kept for NER under BE 2005-06 for the Department of Secondar and Higher Education and Elementary Education and Literacy respectively. Out of this an amount of Rs 187.57 crore and Rs 501.60 crore has been certified for expenditure on various schemes of the Department of Secondary and Higher Education and Elementary Eduction and Literacy till 31 January 2006.

The Kendriya Vidyalaya Sangathan are running 86 schools in the North East Region.

The Navodaya Vidyalaya Samiti are trying to achieve their goal of opening one JNV in each of the 78 districts of the North Eastern States. Presently 76 JNVs have been sanctioned for the NE Region.

During 2003-04, the Department of Secondary and Higher Education was able to spend over 10 per cent of its RE in the North Eastern States.

UNIVERSITY AND HIGHER EDUCATION

Universities and university-level institutions in India include 20 Central Universities, 215 State Universities, 100 Deemed Universities, 5 institutions established under State Act and 13 institutes of national importance apart from around 17,000 colleges including 1800 womens colleges.

UNIVERSITY GRANTS COMMISSION

The University Grants Commission (UGC) which came into existence on 28 December 1953, became a statutory organisation by an Act of Parliament in 1956. It is a national body for the coordination, determination and maintenance of standards of university education. It serves as a coordinating body between the Union and State Governments and the institutions of higher learning. It also acts as an advisory body to these Governments and institutions on issues relating to higher education.

Section 12 of the UGC Act provides that the Commission shall, in consultation with the universities concerned, take all such steps as it may think fit for the promotion and coordination of university education and for the maintenance of standards in teaching, examination and research. To teaching and research, extension was added as the third dimension of education by the Commission. For the purpose of performing its functions, the Commission may allocate and disburse, out of the Fund of the Commission, grants to universities and colleges for their maintenance and development; advise the Union Government, State Governments and Institutions of higher learning on the measures necessary for the promotion of university education and make Rules and Regulations consistent with the Act, etc.

The Commission consists of the Chairman, Vice-Chairman and 10 other members appointed by the Government of India. The executive head is Secretary.

The University Grants Commission has its Regional Offices at Hyderabad, Pune, Bhopal, Kolkata, Guwahati and Bangalore. The Northern Regional Office which was earlier located at Ghaziabad has now been functioning from the UGC Head Quarters as Northern Regional Colleges Bureau (NRCB). The UGC has taken up some new initiatives, viz.

- Promotion of Entrepreneurship and knowledge based enterprises.
- Protection of Intellectual Property Rights.
- Promotion of Indian Higher Education abroad.
- Training and development of Academic Administrators.
- Comprehensive Computerisation Initiative.

AUTONOMOUS RESEARCH ORGANISATIONS

The Indian Council of Historical Research (ICHR), New Delhi, set-up in 1972, reviews the progress of historical research and encourages scientific writing of history. It

operates research projects, finances research projects by individual scholars, awards fellowships and undertakes publication and translation work.

The Indian Council of Philosophical Research (ICPR), functioning from 1977 with offices in New Delhi and Lucknow, reviews the progress, sponsors or assists projects and programmes of research in philosophy, and gives fiancial assistance to institutions and individuals to conduct research in philosophy and allied disciplines.

The Indian Institute of Advanced Study (IIAS), Shimla set up in 1965 is a residential centre for advanced research in humanities, social sciences and natural sciences. It is a community of scholars engaged in exploring new frontiers of knowledge aimed at conceptual development and offering interdisciplinary perspectives on questions of contemporary relevance.

The Indian Council of Social Science Research (ICSSR), New Delhi, is an autonomous body for promoting and coordinating social science research. Its main functioning are to review the progress of social science research, give advice on research activities in government or outside, sponsor research programmes and give grants to institutions and individuals for research in social sciences.

The National Council of Rural Institute (NCRI) was set up in 1995 as a autonomous organisation fully funded by the Central Government to promote rural higher education on the lines of Mahatma Gandhi's revolutionary and voluntary agencies in accordance with Gandhian Philosophy of education and promote research as tool of social and rural development.

INDIRA GANDHI NATIONAL OPEN UNIVERSITY

The Indira Gandhi National Open University (IGNOU) established in September 1985, is responsible for the promotion of Open University and distance education system in the educational pattern of the country and for coordination and determination of standards in such systems. The major objectives of the University include widening access to higher education to larger segments of the population, organising programmes of continuing education and initiating special programmes of higher education for specific target groups like women, physically challenged and people living in backward regions and hilly areas, such as NE, KBK, and those predominantly inhibited by tribals and SCs.

The IGNOU provide an innovative system for tertiary education and training. The system is flexible and open in regard to methods and pace of learning, combination of courses, eligibility for enrolment, age of entry, method of evaluation, etc. The University has adopted an integrated multimedia instructional strategy consisting of printed materials, audio-visual aids, educational radio and TV, teleconferencing and video conferencing supported by face-to-face counseling sessions through a network of study centres throughout the country. It conducts both continuous evaluation as well as term-end examinations.

The IGNOU introduced its programmes in 1987 and has so far launched 117 programmes consisting of more than 900 courses consisting of Ph.D., Master's Degree Programmes, Advanced / Post Graduate Diploma, Diploma Programmes and Certificate Programmes, etc. During 2005 over 4.60 lakh students were registered for various programmes of study.

The University has established an extensive student support services network consisting of 60 regional centres, 7 sub-regional centres and 1298 study centres situated in different parts of the country. IGNOU has established 269 study centres

for women, SC / ST and physically challenged persons. On 26 January 2001, IGNOU launched an education channel Gyandarshan which is now a 24-hour channel and has capacity for six simultaneous telecasts. In November 2001, IGNOU launched FM Radio Network for providing additional student support. As of now, 17 FM radio stations are functional and this number should increase to 40 FM stations in course of time. The launch of an exclusive educational satellite Edusat is an historic opportunity for the growth and development of distance education to create Educated India and meet the aspirations of our people and empower them through quality education. In the year 2005, the university established 100 Edusat supported Satellite Interactive Terminals (SITs) in its regional / study centres all over the country. Distance Education Council, established by the University as a statutory authority, is an apex body for coordination and determination of standards in distance education in the country.

MINORITY EDUCATION

The National Policy on Education 1986, updated in 1992 envisages paying greater attention to the education of the educationally backward minorities in the interest of equity and social justice. In pursuance of the revised Programme of Action (POA) 1992, two new Centrally-sponsored schemes, i.e., (i) Scheme of Area Intensive Programme for Educationally Backward Monorities; and (ii) Scheme of Financial Assistance for Modernisation of Madarsa Education were launched during 1993-94.

Over a time, it has been felt that all these schemes need to be implemented in an integrated way so as to have wider coverage, greater thrust and visibility of minority education programme. In the Tenth Plan the aforesaid two schemes have been merged to form the Area Intensive and Madarsa Modernisation Programme.

The National Commission for Minority Educational Institutions 2004 has been set-up by an Act of Parliament under which minority education institutions can seek affiliation to Scheduled Universities. University of Delhi, North Eastern Hill University; Pondicherry University; Assam University; Nagaland University and Mizoram University are at present in the Schedule.

TECHNICAL EDUCATION

The Technical Education System in the country covers courses in engineering, technology, management, architecture, pharmacy, etc. The Ministry of Human Resource Development caters to programmes at undergraduate, postgraduate and research levels. The technical education system at the central level comprises, among others, the following : a) The All India Council for Technical Education (AICTE), which is the statutory body for proper planning and coordinated development of the technical education system; b) Seven Indian Institutes of Technology (IITs); c) Six Indian Institutes of Management (IIMs); d) Indian Institute of Science (IISc), Bangalore; e) Indian Institute of Information Technology and Management (IIITM), Gwalior; Indian Institute of Information Technology (IIIT), Allahabad; and its Extension Campus at Amethi; and Indian Institute of Information Technology, Design and Manufacturing, (IIITDM) Jabalpur; and f) Eighteen National Institutes of Technology (NITs) (converted from RECs with 100 per cent Central funding).

New initiatives have been taken to promote research and education in basic sciences in the country. The IIS, Bangalore was sanctioned a special grant of Rs 100 crore to upgrade its infrastructure facilities, including laboratories. On the

recommendation of the Scientific Advisory Council to the Prime Minister, two Indian Institutes of Science Education and Research have been approved at Pune and Kolkata. These Institutes will combine education in basic sciences at undergraduate and postgraduate level, with world class research facilities.

To enhance research productivity in Science and Technology Education and to improve quality of education, access to electronic journals and databases is being provided to all technical institutions. To benefit from lower costs, AICTE and Indian National Digital Library for Science and Technology (INDEST) have joined hands to form a combined AICTE-INDEST consortium.

During the 10th Plan, there has been a significant increase in the number of Technical Education instituions and total intake of students. Of the 10th Plan outlay of Rs 13,825 crore for the Department of Secondary and Higher Education, Rs 4700 crore was earmarked for 16 programmes of Technical Education. Of this, the major share goes to the World Bank-aided Technical Education Quality Improvement Programme (TEQIP) with an outlay of Rs 900 crore; AICTE with an outlay of Rs 600 crore and IITs with an outlay of Rs 612 crore. The outlay for Annual Plan 2004-05 for Technical Education was Rs 750 crore and expenditure Rs 615.85 crore.

INDIAN NATIONAL COMMISSION FOR CO-OPERATION WITH UNESCO (INCCU)

India has been a member of the United Nations' Educational, Scientific and Cultural Organisation (UNESCO) since 1946. The Government set up an interim Indian National Commission for Cooperation with UNESCO (INCCU) in 1949, which was later put on a permanent footing in 1951. The Commission consists of five Sub-Commissions namely, Education, Natural Science, Social Sciences, Culture and Communication.

The main objective of the Commission is to advise the Government in matters falling in the domain of UNESCO and to play a role in UNESCO's work, particularly in the formulation and execution of its programmes. The Minister for Human Resource Development is the President of the Commission and the Secretary of the Government of India in the Department of Secondary and Higher Education is its Secretary General. The membership of the Commission is of two categories; (i) Individual and (ii) institutional members distributed among its five Sub-Commissions.

The National Commission acts as an advisory, coordinating and liaison agency at the national level in respect of all matters within the competence of UNESCO. It also collaborates with the National Commissions of the Region and with UNESCO's Regional Offices, for fostering regional, sub-regional and bilateral co-operation in education, science, culture and information.

BOOK PROMOTION

National Book Trust, India: The National Book Trust, India an autonomous organisation under the Ministry of Human Resource Development, was established in 1957. The activities of the NBT are : (i) publishing, (ii) promotion of books and reading, (iii) promotion of Indian books abroad, (iv) assistance to authors and publishers, and (v) promotion of children's literature. It produces books in Hindi, English and fifteen other major Indian languages under its various series and in Braille. Every alternate year, NBT organises the World Book Fair in New Delhi, which is the largest book fair in Asia and Africa. The Trust also observes 14-20 November every year as National Book Week.

The 17th New Delhi World Book Fair was held from 27 January - 4 February 2006. Around 1300 participants including 37 from 18 foreign countries and international bodies, viz., ILO, WHO, UNICEF and EU among others attended the fair.

Frankfurt Book Fair 2006 – India Guest of Honour : On the invitation of the Frankfurt Book Fair authorities, India was the Guest of Honour at the 58th Frankfurt Book Fair-2006. The NBT was the Nodal Agency for organising and implementing various activities.

COPYRIGHT

Administering the Copyright Act, 1957, one of the several legislations in India in the area of Intellectual Property Rights (IPRs), is the responsibility of the Union Ministry of Human Resource Development, Department of Secondary and Higher Education. The Copyright Office was established in January 1958 to register copyright of works under different categories. As per Section 33 of the Copyright Act, the Central Government also registers copyright societies for doing copyright business. The Indian Copyright Act, 1957 was comprehensively amended in 1994 taking into account the technological developments. The amended Act was brought into force on 10 May 1995. The Act as further amended in 1999, came into force on 15 January 2000. Under the provisions of Section 11 of the Copyright Act, 1957, the Government of India has constituted a Board to be called the Copyright Board. The Copyright Board is a quasi-judicial body consisting of a Chairman and not less than two or more than fourteen other members. The Chairman and other members of the Board are appointed for a term of five years. The Copyright Board was reconstituted for a term of five years with effect from 22 February 2001. The Board hears cases regarding rectification of copyright registration, disputes in respect of assignment of copyright and granting licenses in works withheld from public.

Copyright Enforcement in India : The Indian Copyright Act, 1957, provides penalties for the offences committed under the Copyright Act and empowers the police to take necessary action. The actual enforcement of the law is the concern of the State Governments. However, during the last few years, the Central Government has taken various steps to improve the enforcement of the Copyright Act to curb piracy. These measures include the setting up of a Copyright Enforcement Advisory Council (CEAC), which has as its members from all concerned departments and representatives of industry to regularly review the implementation of the Copyright Act including the provisions regarding anti-piracy. Several other measures taken by the Central Government include, persuading the State Government for (i) the setting up of Special Cells in State Governments for enforcement of Copyright Laws; (ii) appointment of nodal officers in the States for facilitating proper coordination between the industry organisations and enforcement agencies; (iii) holding of seminars / workshops, etc., for sensitising the public about Copyright Laws; (iv) Collective Administration by Copyright Societies.

Cooperation with WIPO : India is a member of the World Intellectual Property Organisation (WIPO), a specialised agency of the United Nations which deals with copyright and other intellectual property rights and plays an important role in all its deliberations.

As per recent amendments in the Government of India (Allocation of Business) Rules, 1961 the work relating to coordination with WITO has been transfered to Ministry of Commence and Industry, Department of Industrial Policy and Promotion.

General Agreement on Trade in Services (GATS) : The last round of General Agreement on Tariffs and Trade (GATT) in 1994 gave rise to multilateral agreement on Trade under the World Trade Organisation (WTO). Prior to emergence of the WTO, there was no multilateral agreement on services. The WTO came into existence on 1 January 1995. The next round of negotiations in 1996 led to a comprehensive agreement on international trade in services. The objective of the agreement is the progressive liberalisation of trade in services. It is to provide secure and more open market in services in a manner similar as the GATT has done for trade in goods. Education is one of the twelve services, which are to be negotiated under the General Agreement on Trade in Services (GATS). Education has been divided into five categories for the purposes of Negotiations: Higher Education, Secondary Education, Primary Education, Adult Education and Other Education.

GATS prescribes the following four modes of Trade in Services including Education Services: (i) Cross-Border Supply of a service includes any type of course that is provided through distance education or the internet, any type of testing service, and educational materials which can cross national boundaries; (ii) Consumption Abroad mainly involves availing services abroad, i.e., students going abroad and is the most common form of trade in educational services; (iii) Commercial Presence refers to the actual presence of foreign investors in a host country. This would include foreign universities setting up courses or entire institutions in another country; and (iv) Presence of Natural Persons refers to the ability of people to move between countries to provide educational services.

Under Education Services the Indian revised offer was to open up the Higher Education Sector with the condition that Higher Education Institutions can be permitted to charge fees to be fixed by an appropriate authority provided such fees do not lead to charging capitation fees or to profiteering. The provision of the Higher Education Services would also be subject to such regulations, already in place or to be prescribed by the appropriate regulatory authority.

11 Energy

ENERGY is an essential input for economic development and improving the quality of life. Development of conventional forms of energy for meeting the growing energy needs of society at a reasonable cost is the responsibility of the Government. Development and promotion of non-conventional / alternate / new and renewable sources of energy such as solar, wind and bio-energy, etc., are also getting sustained attention. Nuclear energy development is being geared up to contribute significantly to the overall energy availability in the country.

POWER

Power development in India commenced at the end of the 19th century with the commissioning of electricity supply in Darjeeling during 1897, followed by the commissioning of a hydropower station at Sivasamudram in Karnataka during 1902. In the pre-Independence era, the power supply was mainly in the private sector that too restricted to the urban areas. With the formation of State Electricity Boards during Five-Year Plans, a significant step was taken in bringing about a systematic growth of power supply industry all over the country. A number of multi-purpose projects came into being and with the setting up of thermal, hydro and nuclear power stations, power generation started increasing significantly.

The Ministry of Power is primarily responsible for the development of electrical energy in the country. The Ministry is concerned with perspective planning, policy formulation, processing of projects for investment decisions, monitoring of the implementation of power projects, training and man-power development and the administration and enactment of legislation with regard to thermal and hydro power generation, transmission and distribution. In all technical matters, the Ministry of Power is assisted by the Central Electricity Authority (CEA).

The construction and operation of generation and transmission projects in the Central sector are entrusted to Central Sector Power Corporations, viz., the National Thermal Power Corporation (NTPC), the National Hydroelectric Power Corporation (NHPC), the North-Eastern Electric Power Corporation (NEEPCO), and the Power Grid Corporation of India Limited (PGCIL). The Power Grid is responsible for all the existing and future transmission projects in the Central Sector and also for the formation of the National Power Grid. Two joint-venture power corporations, namely, Satluj Jal Vidyut Nigam (SJVN) (formerly known as NJPC) and Tehri Hydro Development Corporation (THDC) are responsible for the execution of the Nathpa Jhakri Power Project in Himachal Pradesh and Projects of Tehri Hydro Power Complex in Uttaranchal respectively. Three statutory bodies, i.e., the Damodar Valley Corporation (DVC), the Bhakra-Beas Management Board (BBMB) and Bureau of Energy Efficiency (BEE), are also under the administrative control of the Ministry of Power. Programmes of rural electrification are provided financial assistance by the Rural Electrification Corporation (REC). The Power Finance Corporation (PFC) provides term-finance to projects in the power sector. The autonomous bodies (societies), namely, Central Power Research Institute (CPRI) and the National Power Training Institute (NPTI) are also under the administrative control of the Ministry of Power. A Power Trading Corporation has also been incorporated primarily to

support the Mega Power Projects in private sector by acting as a single entity to enter into power Purchase Agreements (PPAs).

Capacity Addition: To meet the projected power requirement by 2012, an additional capacity of 1,00,000 MW is required during the 10^{th} and 11^{th} Five-Year Plans. A capacity of nearly 41,110 MW (Thermal: 25416.24 MW) is targeted to be set up in the Tenth Plan and the remaining in the Eleventh Plan with a stronger focus on hydropower. The Central Sector would contribute 22,832 MW (Thermal: 12790 MW), the State Sector 11,157 MW (Thermal: 6675.64 MW) and Private Sector 7,121 MW (Thermal : 5950.6 MW) in the Tenth Plan. However as per latest review, the likely capacity addition during 10^{th} Plan is 30,700 MW.

The installed power generation capacity in the country has increased from 1,400 MW in 1947 to 1 24287.17 MW as on 31 March 2006 comprising 82, 410.54 MW thermal, 32,325 MW hydro, 6190.86 R.E.S and 3360 MW nuclear. A capacity addition programme of 19682 MW has been fixed for the year 2006-07. Considering the fact that a large chunk of proportion of the installed capacity will come from the public sector, the outlay for the power sector has been raised from Rs. 45,591 crore during the Ninth Plan to Rs.1,43,399 crore in the Tenth Plan. This would include a gross budgetary support of Rs, 25,000 crore and the remaining Rs. 1,18,399 crore would be internal and from extra budgetary resources.

Power generation during 2005-06 was 617.510 BUs comprising 497.214 BUs thermal, 103.057 BUs hydro. The target of power generation for 2006-07 has been fixed at 663 BUs. The plant load factor has shown a steady improvement over the years and has improved from 52.8 per cent in 1990-91 to 73.6 per cent in 2005-06.

50,000 MW Hydro Electric Initiative : Under the 50,000 MW initiative launched by the Government in 2003-04, 162 hydro electric projects spread in 16 states for the purpose of preparation of Preliminary Feasibility Reports (PFRs) were taken up by CEA as nodal agency. The PFRs were completed in September 2004 for all these projects with an installation of 47,930 MW.

As a follow up of preparation of PFRs implementation / preparation of DPRs for attractive schemes selected from PFR schemes have already been taken up thereby providing a shelf of projects for execution in the near future. At the first instance, based on their preliminary techno-economic analysis, 77 schemes (33951 MW) whose first year tariff works out below Rs. 2.50 / kWh have been considered as low tariff H.E. schemes and have been selected for taking up of detailed survey and investigation and preparation of DPR / implementation. Action has already been initiated for these schemes for S&I and preparation of DPR by CPSUs / SPSUs / SEBs in consultation with respective state governments. Among these 77 projects, 12 projects (3043 MW) have been identified as likely to yield benefits during 11^{th} Plan and balance during subsequent plans. Till date, DPRs for 4 schemes (1160 MW / revised capacity 961 MW) have already been prepared.

1,00,000 MW Thermal Initiative : Keeping in view the huge power generation capacity requirement, Ministry of Power / CEA has proposed a 100,000 MW environment friendly thermal initiative. This initiative has been intended to prepare shelf of projects, which could be taken up during the course of 11^{th} & 12^{th} Plan.

The Standing Committee constituted by CEA is in the process of identifying new sites in consultation with the State Utilities. CEA has awarded studies to CMPDI and NRSA for identification of large pithead and coastal sites respectively by using satellite mapping through remote sensing. CMPDI has submitted the report for the

36,000 MW pithead power plant sites identified near the coal blocks in the eight major coalfields. They have also identified additional coal blocks for 24,000 MW capacity for which they will be identifying the power plant sites. NRSA has submitted the reports for coastal sites in Gujarat, Maharashtra, Tamil Nadu and Andhra Pradesh. The reports of CMPDI and NRSA have been sent to the concerned state governments and also made available to prospective developers for further investigation and development of sites for setting up thermal power plants. Many of these sites have been identified for development by various developers.

Higher sized coal based units of 800-1000 MW which are environment friendly with super critical technology are proposed to be introduced to achieve the huge capacity addition programme. Also, in view of the difficulties faced by power utilities in getting coal allocation, thrust is now being given to identify and set up power plants in the coastal regions using imported / washed coal.

The CEA has already prepared shelf of sites for thermal power projects totaling to more than 100,000 MW capacity. Of this shelf, about 40,000 MW projects are to be taken up for implementation during 11^{th} Plan including benefits from Ultra Mega Power Projects . The need for capacity addition during 12^{th} Plan would be firmed up towards the end of 11^{th} Plan.

National Grid : The Ministry of Power envisages establishing an integrated National Power Grid in the country in a phased manner by the year 2012. The first phase was completed in 2002, wherein regional grids were mainly connected by HVDC back to back stations, of and an inter-regional power transfer capacity of 5050 MW was established. The implementation of the second phase has already commenced and with the commissioning of Talcher Kolar HVDC bipole, Raipur Rourkela 400 kV D / C transmission system along with series compensation and a second back to back station at Gajuwaka, the inter-regional power transfer capacity has grown to 9450 MW. It has created a synchronous grid from Arunachal Pradesh to Goa spanning across a length of 2500 km, encompassing an area of 16 lakh Sq.Km with an installed capacity of over 50,000 MW. With other links, under implementation / planning, cumulative inter regional power transfer capacity is expected to be enhanced to 37,150 MW by the year 2012.

CENTRAL ELECTRICITY AUTHORITY

Central Electricity Authority (CEA), a statutory organisation constituted under Section 3(1) of the Electricity Supply Act, 1948 which has been superseded by Section 70 (1) of Electricity Act, 2003, plays an important role in formulating policies and programmes for power development in the country and in planning and coordinating various development activities in the Power Sector. CEA advises the Central Government on matters relating to the National Electricity Policy, formulates short-term and perspective plans for development of the electricity system and coordinates the activities of the planning agencies for the optimal utilisation of resources to subserve the interests of the national economy and to provide reliable and affordable electricity for all consumers.

Under the Electricity Act, 2003, CEA makes regulations / standards on matters such as construction of electrical plants, electric lines and connectivity to the grid, installation and operation of meters, concurrence of hydro-electric schemes, safety and grid standards. It also specifies measures relating to safety with respect to electricity supply. This will inculcate higher efficiency in all fields of the power sector.

The CEA is responsible for the concurrence of hydro power development schemes of the Central, State and Private sectors taking into consideration the best ultimate development of the river or its tributaries for power generation, consistent with the requirement of drinking water, irrigation, navigation, flood control or for other public purposes. It also makes studies for the optimum location of dams and other river works keeping in view the norms regarding dam design and safety.

It promotes and assists in the timely completion of schemes and projects for improving and augmenting the electricity system by carrying out a close monitoring of the construction of generation and transmission projects to ensure their timely completion by identifying bottlenecks and problem areas and initiating remedial measures / actions. It lays stress on improving the performance of existing power stations through better O&M practices, renovation and modernisation and life extension programmes. It is also charged with the responsibility of monitoring Schemes / Projects for their timely completion.

Collection and recording the data concerning the generation, transmission, trading, distribution and utilisation of electricity and carrying out studies relating to cost, efficiency, competitiveness, etc., are important functions of the CEA. It makes public from time to time information secured under the Electricity Act, 2003 and provides for the publication of reports and investigations.

The CEA advises Central Government, State governments and Regulatory Commissions on all technical matters relating to generation, transmission and distribution of electricity. It also advises State Governments, licensees or generating companies on such matters which shall enable them to operate and maintain the electricity system under their ownership or control in an improved manner and where necessary, in coordination with any other Government, licensee or the generating company owning or controlling another electricity system.

The CEA plays a lead role in promoting an integrated operation of Regional Grid systems and the evolution of a National Grid. The Eastern, North-Eastern and Western regions have been integrated and are operating in a synchronous mode. The Eastern Region is connected with the Northern as well as the Southern Region through HVDC back to back links. Similarly, the Western Region is also connected with the Northern and the Southern Regions through the same arrangements. The CEA facilitates exchange of power within the country from surplus to deficit regions and with neighbouring countries for mutual benefits.

It promotes research in matters affecting the generation, transmission, distribution and trading of electricity; carries out, or causes to be carried out, any investigation for the purposes of generating or transmitting or distributing electricity and promotes measures for advancing the skills of persons engaged in the electricity industry. It actively participates in power supply restoration process in case of occurance of unfortunate incidents of destruction caused due to drought / cyclone / floods / tsunami, etc., in various parts of the country.

The CEA makes a significant contribution to a number of professional fora in India as well as abroad like the Conference International Des Grands Research Electriques (CIGRE), the Bureau of Indian Standards (BIS), the Central Board of Irrigation and Power (CBI&P), etc. The CEA renders consultancy services in the planning and design of hydro, thermal and transmission projects.

THE ELECTRICITY ACT, 2003

The Electricity Act, 2003 has been enacted and the provisions of this Act have been brought into force with effect from the 10 June 2003 (with this, the Indian Electricity Act, 1910, the Electricity (Supply) Act, 1948 and the Electricity Regulatory Commissions Act, 1998 stand repealed). The main features of the Act are as follows:

(i) Generation has been delicensed and captive generation freely permitted. Hydro projects would, however, need concurrence from the Central Electricity Authority.

(ii) No license required for generation and distribution in rural areas.

(iii) Transmission Utility at the Central as well as state level, to be a government company – with responsibility for planned and coordinated development of the transmission network. Provision for private licensees in transmission.

(iv) Open access in transmission with provision for surcharge for taking care of current level of cross subsidy with the surcharge being gradually phased out.

(v) Distributing licensees would be free to undertake generation and generating companies would be free to take up distribution.

(vi) The State Governments are required to unbundle the SEBs. However, they may continue with them as distribution licensees and State Transmission Utilities.

(vii) Setting up of the State Electricity Regulatory Commission (SERC's) made mandatory.

(viii) An Appellate Tribunal to hear appeals against the decision of the CERC and SERCs.

(ix) The SERCs are required to permit open access in distribution in phases with surcharge for current level of cross subsidy to be gradually phased out along with cross subsidies and obligation to supply.

(x) Metering of electricity supplied, made mandatory.

(xi) Provisions relating to theft of electricity made more stringent.

(xii) Trading as, a distinct activity recognised with the safeguard of the Regulatory Commissions being authorised to fix ceilings on trading margins, if necessary.

(xiii) For rural and remote areas stand alone systems for generation and distribution permitted.

(xiv) Thrust to complete rural electrification and provide for management of rural distribution by panchayats, cooperative societies, non-government organizations, franchises, etc.

(xv) The Central Government to prepare a National Electricity Policy and Tariff Policy.

(xvi) The Central Electricity Authority to prepare a National Electricity Plan.

Formulation of Rules and Regulations by the Central Electricity Authority : Section 177 of the Electricity Act, 2003 requires the CEA to make regulations consistent with the Act and rules to carry out provisions of this Act. Regulations on Installation and Operation of Metres has since been notified by Government of India. Draft regulations on Rules of Procedure for Transaction of Business, Grid Connectivity have been prepared and comments / suggestions from various stake holders have been received and the regulations are being finalised for notification.

The other draft regulations on Safety, Grid Standards and Technical Standards, etc., are also being got readied for previous publication.

Appellate Tribunal for Electricity: The Central Government has established Appellate Tribunal for Electricity under Section 110 of the Electricity Act, 2003 on 7 April 2004. The headquarters of the Appellate Tribunal is at Delhi. The Appellate Tribunal will hear appeals against orders of the Regulatory Commissions / Adjudicating Officers.

National Electricity Policy: The National Electricity Policy has been notified by the Government under the Act. Competitive bidding guidelines have been issued by the Government. The Tariff Policy has been notified.

National Electricity Plan : The draft National Electricity Plan has been prepared and sent to MOP for approval.

Anti-theft legislation : The States of Andhra Pradesh, Karnataka, Madhya Pradesh, Uttar Pradesh, West Bengal, Maharashtra, Kerala, Gujarat, Bihar, and Punjab have passed / drafted anti-theft laws.

Special courts dealing with Power theft have been set up in the States of Andhra Pradesh, Delhi, Himachal Pradesh, Madhya Pradesh, Manipur, Rajasthan, Tripura, Uttar Pradesh, West Bengal and Karnataka.

Redressal of grievances of Consumers and appointment of an Ombudsman: As per the provision of the Electricity Act, 2003, every distribution licensee shall have to establish a forum for redressal of grievances of the Consumers in accordance with the guidelines as specified by the State Commission. Every State Commission shall appoint an Ombudsman. Any consumer who is aggrieved by the non-redressal of his grievances may make a representation for the redressal of his grievances to the Ombudsman. Distribution Companies in many States have taken action to establish the redressal grievances forum and many State Commissions have appointed an Ombudsman. Other States are in the process to take the action in this behalf.

ACCELERATED POWER DEVELOPMENT AND REFORMS PROGRAMME

The Government has launched the Accelerated Power Development Reforms Programme (APDRP) which aims at upgradation of sub-transmission and distribution system, in the country and improvement in the commercial viability of State Electricity Boards by reducing the aggregate technical and commercial (AT&C) losses to around 15 per cent as against the existing over 50 per cent. This will ensure reliability and quality of power supply with adequate customer satisfaction. This involves a Six Level Intervention Strategy that encompasses initiative at National Level and Level, State Electricity Board / Utilities level, distribution circle level, feeder level and the customer level. This strategy aims at technical, commercial, financial and IT intervention, organisation and restructuring measures and incentive mechanism for cash loss reduction. The APDRP has two components (a) investment component for strengthening and upgradation of the sub-transmission and distribution system – the Central Government provides additional Central assistance to the States for strengthening and upgradation and distribution work. The Government has sanctioned 583 projects amounting to Rs. 19180.46 crore in various states all over the country during last three years (b) under the incentive component, an incentive equivalent to 50 per cent of the actual cash loss reduction by SEBs / Utilities is provided as grant. The disbursement upto March 2006 was Rs 6131.70

crore for the investment component and Rs. 1536.64 crore for incentive component under the scheme.

Selection of sites for Thermal Power Projects : In the context of the need to set up additional thermal power stations to meet the power requirements of the country up to the year 2012 AD and beyond, the CEA had in September 2001 constituted a committee under the Chairmanship of Member (Thermal) and consisting of members from different Ministries / Deptts. / SEBs, etc., for selection of sites for large coastal / pithead and other Thermal Power Stations. As the process of selection of sites is of continuous nature, the above mentioned Committee was converted into a Standing Committee. Teams consisting of the members of the Committee from CEA, Planning Commission, MoE&F, CMPDI, Railways, etc., are being constituted from time to time for visiting the sites tentatively identified by the State agencies. These teams also interact with various States / Central Departments for assessing the availability of various inputs like land, water, fuel, etc., required for setting up of Thermal Power Plants.

The CEA has also awarded studies to CMPDI and NRSA for identification of large pithead and coastal sites using satellite mapping through remote sensing. CMPDI has submitted the reports for the 36,000 MW near the coal blocks in eight major coalfields. They have also identified additional coal blocks for 24,000 MW capacity for which they will be identifying the power plant sites. NRSA has submitted reports for the States of Gujarat Maharashtra, Andhra Pradesh and Tamil Nadu. They are carrying out studies for the other coastal states.

Based on the reports of the teams of the Committee which visited identified sites in different states, the Reports of CMPDI / NRSA and details of various other sites compiled by the Committee, a large shelf of potential sites has been created. Many sites from this shelf have been identified for benefits during the 11th Plan. The reports of CMPDI and NRSA have been forwarded to the concerned State governments / NTPC for development of the identified sites. The NRSA reports for coastal sites have also been given to the Site Selection Committee of Nuclear Power Corporation who are in the process of identifying coastal sites for new Nuclear Power Plants.

Setting up of Ultra Mega Power Projects : The Ministry of Power, Government of India in association with Central Electricity Authority and Power Finance Corporation has launched an initiative for development of coal based Ultra Mega Power Projects in India, each with a capacity of 4000 MW or above. These projects will be awarded to developers on the basis of tariff based competitive bidding.

To facilitate tie-ups of inputs and clearances, project specific shell companies are set up as wholly owned subsidiaries of the Power Finance Corporation Ltd. These companies will undertake preliminary studies and obtain necessary clearances including water, land, fuel, power selling tie-up, etc., prior to the awarding of the Project to the successful bidder. Initially, five sites were identified by CEA in different states for the proposed Ultra Mega Power Projects. These include two pithead sites one each in Madhya Pradesh and Chhattisgarh and three coastal sites in Gujarat, Karnataka and Maharashtra. On the request of the State governments of Orissa and Andhra Pradesh, two more sites have been identified for Ultra Mega Projects consisting of a pithead site in Ib-Valley coalfield in Orissa and a coastal site at Krishnapatnam in Andhra Pradesh. It is proposed to set up pithead projects as integrated proposals with corresponding captive coal mines. The Ministry of Power has already requested Ministry of Coal to allocate such large coal blocks. For the coastal projects imported coal shall be used.

The projects are to be developed with a view to result in minimum cost of power to the consumers. Because of bigger sized units, the cost of the project would be lower due to economy of scale. These projects would be environment- friendly as supercritical technology is proposed to be adopted to reduce emissions. Further, the layout of the project would be compact and all systems would be optimised resulting in a lower cost of power. Further a time-bound action plan for preparation of project reports, tie-up of various inputs / clearances, appointment of consultants, preparation of RFQ / RFP have been prepared. The whole process up to selection of bidder is proposed to be completed in a period of one year. Once the developer is selected, the ownership of the Shell companies shall be transferred to the successful bidders.

Expression of Intent (EOI) have been issued in respect of four Ultra Mega Power Projects (UMPP), namely, Sasan UMPP in Madhya Pradesh, Mundra UMPP in Gujarat, Girye UMPP in Maharashtra and Tadri UMPP in Karnataka. EOI for two new projects, namely, Ib valley UMPP in Orissa and Krishnapatnam UMPP in AP are likely to be issued shortly. The shell Companies have appointed technical consultants for the projects for which EOI have been issued. They have also separately appointed consultants for preparation of bid documents namely RFQ & RFP, etc. The RFQ bid documents for Sasan and Mundra projects have been issued on 31 March 2006. The time schedule of various activities upto selection of the developer is as follows:

Activity	Date
Submission of Bids (RFQ)	14 May 2006
Issue of RFP Documents	1 July 2006
Submission of Bids (RFP)	30 September 2006
Selection of Developer / Transfer of SPV	31 December 2006

Private Sector Participation : The Government announced a policy in 1991 which allowed private sector participation in power generation schemes. It was decided in February 1995 that no private power project proposal would be considered by the Central Electricity Authority (CEA), if the project was not awarded through the international competitive bidding (ICB) route after a cut-off date of 18 February, 1995. Since 1991, a total capacity of around 7637.21 MW from 40 large and medium sized conventional private power plants has so far been commissioned and another capacity of around 5500 MW from 11 conventional power projects are under construction.

The Electricity Act, 2003 that has been enacted reduced the barriers to entry to different segments of the sector. Thermal generation has been delicensed. Captive generation is freely permitted. Transmission, distribution and trading of electricity are licensed activities. To facilitate the growth on of all India electricity market, open access in transmission has been put in place. Open access in distribution is to be introduced in phases. The law also permits more than one distribution licensee in the same area. 100 per cent FDI has been permitted through automatic route in generation, transmission and distribution. Power trading has recently been fully opened for foreign investment.

The Ministry of Power has been closely monitoring the power projects in the private sector which are considered possible for early financial closure. An inter-Institutional Group (IIG) comprising of senior representatives from the lenders and

Ministry of Power has been constituted to jointly appraise such projects and facilitate financial sanction in a time-bound fashion. Fourteen power projects with a total capacity of about 5927 MW have since achieved financial closure and nine more projects with a total capacity of about 10432 MW are being pursued for early financial closure.

PUBLIC SECTOR UNDERTAKINGS AND OTHER ORGANISATIONS

NATIONAL HYDROELECTRIC POWER CORPORATION LTD.

The National Hydroelectric Power Corporation Ltd., is a Schedule 'A' Enterprise of the Government of India with an authorised share capital of Rs. 1,50,000 million and an investment base of over Rs. 2, 22,000 million. Established in 1975, in its existence of about 31 years, NHPC has become the major organisation for hydropower development in India, with capabilities to undertake all the activities from "concept to commissioning" in relation to setting up of hydro projects. The NHPC has ISO-9001 certification for its quality management system and ISO-14001 for an environment standard in Corporate Office.

The NHPC has completed 9 hydro electric projects with an installed capacity of 2,755 MW on its own and one project, i.e., Indira Sagar (1,000 MW) in MP which is a joint venture with the Government of M.P. 10 projects of NHPC with an installed capacity of 5,103 MW and one project in joint venture with Government of MP, i.e., Omkareshwar (520 MW) is under active construction stage. In addition NHPC has also completed the 14.1 MW Devighat Hydropower Project in Nepal, 60 MW Kurichu Hydro Power Project in Bhutan and 5.25 MW Kalpong Hydro Power Project in the Andaman and Nicobar Islands on deposit work basis. Power generated at these Power Stations is supplied to 24 States / Union Territories.

The NHPC is a profit-earning organisation since becoming operational, with profit showing an upward trend. It registered a net profits of Rs. 701 crore with an all time high sales turnover of Rs. 1834 crore during the year 2005-06. The NHPC power stations generated the highest ever generation of 12567 million units and achieved Capacity Index of 98.16 per cent during 2005-06. NHPC has been assigned the highest rating 'AAA' (ind) by Fitch ratings for domestic borrowings and Sovereign rating for external borrowings by Fitch ratings and S&P.

The NHPC has been providing consultancy services in the area of hydro power development to the clients in India and abroad. NHPC is registered as a Consultant in the area of Hydro Power with International Funding Agencies like World Bank, Asian Development Bank, African Development Bank, etc. New Consultancy assignments amounting to Rs. 65 crore were received during the financial year 2004-05.

The NHPC has signed a Memorandum of Understanding with the Uttaranchal Government for the implementation of a 240 MW Chungar Chal, 630 MW Garba Tawaghat and 55 MW Karmoli Lumti Tulli Projects in Uttaranchal. Power Purchase agreements have been signed for Kishanganga, Nimmo Bazgo, Chutak, Uri-II, Dul Hasti, Chamera-III and Teesta Low Dam Project Stage-IV with the concerned beneficiaries. The NHPC has signed agreements with the Government of Sikkim for the execution of the 495 MW Teesta Stage-IV and 210 MW Lachen Hydroelectric Projects in Sikkim on BOOM basis.

The Organisation has launched a major initiative to implement Enterprise Resource Planning (ERP) software solution framework for integrating major business processes to achieve quality of work, improved profitability and performance.

NATIONAL THERMAL POWER CORPORATION LIMITED

The NTPC Ltd. (formerly National Thermal Power Corporation Ltd.) was incorporated in November 1975 with the objective of planning, promoting and organising an integrated development of thermal power in the country. The company has now been renamed as NTPC Ltd. In line with the changes taking place in the business portfolio of the company that transformed the company into an integrated Power Company it has now a presence across the entire energy value chain. NTPC is a schedule 'A' Navratna' company having a total approved investment of Rs. 91619.92 crore, as on 31 March 2006.

The Corporation has under operation/implementation coal based super thermal power projects at 16 locations and combined cycle gas power projects at 7 locations, including the 705 MW Badarpur Thermal Power Station (BTPS) in Delhi which NTPC had been managing on behalf of Government of India and has since been taken over by NTPC w.e.f. 01 June 2006. The commissioned capacity of NTPC-owned stations as on 30 June 2006 is 24,640 MW. In addition, it has acquired 314 MW of captive power plants of Steel Authority of India Limited (SAIL) through formation of joint venture companies with it. NTPC is at present implementing 10 power projects with a capacity of 9470 MW. The Corporate Plan adopted by NTPC envisages it to become a 46,000 MW plus company by the year 2012 and 66000 MW plus company by 2017.

During the year 2005-06 an all time high generation of over 170,880 MUs was achieved registering an increase of 7.4 per cent over the previous year's generation of 159,110 MUs. NTPC coal based stations achieved ever-highest PLF of 87.54 per cent since inception during the year.

Ratnagiri Gas and Power Private Ltd. was formed on 08 July 2005 as a joint venture between NTPC, GAIL, MSEB holding company and Indian Financial Institutions with a view to take over the assets of the erstwhile Dabhol Power Company Ltd., complete the project and operationalise it. NTPC has invested Rs. 500 cr. as 28.33 per cent equity in this project. The Block-II (740MW) of the 2150MW Dabhol project was taken up for revival on a fast track basis after transfer of its assets in October 2005 to RGPPL and has already been synchronised in April-May 2006.

The NTPC is implementing its first hydro project, the 800MW Koldam Hydroelectric Power Project (HEPP) in Himachal Pradesh. Further, NTPC has signed the Implementation Agreements for execution of Loharinag Pala HEPP (600 MW), Tapovan-Vishnugad HEPP (520 MW) and Rupsiabagar Khasiyabara HEPP(260 MW. Moreover, NTPCs subsidiary NTPC Hydro Ltd. (NHL) has signed the Implementation Agreements for execution of Lata-Tapovan (171MW) HEPP and Rammam-III (120 MW) HEPP.

During the year, a consortium comprising NTPC Ltd., Canoro Resources Ltd and Geo Petrol International has been allotted an oil exploration block in Arunachal Pradesh. A Production Sharing Contract (PSC) for the block has been signed between the Government of India and the Consortium.

The NTPC was allotted Pakri Barwadih coal mining blocks by Government of India and action have been initiated by NTPC for its development. Further, NTPC has been allotted 7 more captive coal mining blocks by the Government. These

blocks are expected to produce 50 million tonnes of coal per annum. Of these 2 mine blocks at Brahmini and Chichro Patsimal in Orissa are to be developed through a 50:50 joint venture between NTPC and Coal India Limited.

As part of its diversification drives, NTPC has formed several joint venture companies such as : NTPC – SAIL Power Supply Company (P) Ltd. (NSPSCL) for operating the Captive Power Plants of Durgapur and Rourkela Steel Plants having total capacity of 240 MW, the Bhilai Electric Supply Company Ltd. (BESCL), for operating Captive Power plant (74 MW) at Bhilai Steel Plant of SAIL. The Company is also implementing or 500 MW (2x250 MW) expansion of Bhilai Captive Power Project. NTPC Alstom Power Services Limited (NASL) for take up renovation and modernisation (R&M) assignments of power plants in India and abroad**;** Utility Powertech Limited (UPL) for taking up assignments of construction, erection and project management in power and other sectors; NTPC Tamil Nadu Energy Company Limited (NTECL) to set up a coal based power station of 1000 MW capacity, at Ennore in Tamil Nadu, using Ennore Port infrastructure facilities, Ratnagiri Gas and Power Private Ltd. (RGPPL) for revival / restart of Ratnagiri Project (erstwhile Dabhol Project).

NTPC has also formed several wholly owned subsidiaries such as : NTPC Vdiyut Vyapar Nigam Limited (NVVN) for trading in Power. NVVN is also engaged in facilitating the development of power exchange in India; NTPC Electric Supply company Ltd. (NESCL) to take up the power distribution business; NTPC Hydro Limited (NHL) for development of small and medium hydro power projects of capacity less than 250 MW; Pipavav Power Development Company Ltd. (PPDCL) for processing of setting up a 1000 MW thermal power project at Pipavav.

NTPC has extended benefits of its success and experience by providing services for the development of Indian Power Sector. NTPC has participated in several programmes of Subsidiaries, such as:

(i) **Accelerated Rural Electrification Programme" (AREP**), later merged with the programme of Electrification of Rural Villages & Households under the name of "Rajiv Gandhi Grameen Vidyutikaran Yojana(RGGVY)", under which NTPC is involved in the turnkey execution of rural electrification work in 40,000 villages in 6 states.

(ii) **Distribution, Reforms and Upgradation Management (DRUM)-** a collaborative effort of Ministry of Power and USAID, with NTPC Power Management Institute (PMI) as a leading partner in delivering training programmes on the distribution business.

(iii) **APDRP (Distribution)-** NTPC has been identified as the lead Advisor cum Consultant(AcC) for implementation of the APDRP programme targeted at improvement of the distribution sector in 12 states, out of which 6 states are directly assigned to NTPC and the balance 6 are through field AcC-CPRI and MECON.

(iv) **Partnership in Excellence** – CEA has identified 26 stations which are operating at a PLF of less than 40 per cent. These stations would have a "Partnership in Excellence" with better performing utilities, so as to achieve an improvement in performance in the shortest possible time. NTPC has been entrusted the responsibility of 14 stations out of the identified 26.

(v) **R&M of SEB stations** – The 10^{th} Plan envisages R&M of an installed capacity

of 11.055 MW with a target of achieving 75-80 per cent PLF and 20 years of life extension. NTPC has taken up consultancy services for a few of these stations.

POWER GRID CORPORATION OF INDIA LIMITED

The Power Grid Corporation of India Limited (PGCIL) was incorporated as a Government enterprise on 23 October 1989 for establishment of regional and national power grids to facilitate transfer of power within and across the regions with reliability, security and economy and on sound commercial principles. It has been recognised as a miniratna category-I PSU.

As on 31 March 2006, PGCIL is operating about 55,120 ckt kms of transmission lines consisting of 563 ckt. kms. of 800 KV, 4,368 ckt kms, of HVDC system, 40,179 ckt kms of 400KV, 7,734 ckt, kms of 220 KV and 2, 241 ckt. kms., of 132 KV and 37 ckt. kms. of 66 KV lines along with 93 sub-stations with about 54, 380 MVA transformation capacity. The transmission system availability is maintained consistently over 99 per cent by deploying the best operation and maintenance practices at par with international utilities. Presently, about 45 per cent of total power generated in the country is being transferred over PGCIL's transmission network. During the year 2005-06, the Organisation has earned a net profit of about Rs. 915 crore (Prov.) on a turnover of about Rs. 3,245 crore(Prov.) and commissioned about 4,400 ckt. kms. of transmission lines and 8 new sub-stations and added transformation capacity of about 5,000 MVA.

With a view to operate, monitor and control the Regional Power Grids in a unified, well coordinated and integrated manner, PGCIL has established Unified Load Dispatch and Communication (ULDC) schemes in all the regional power grid of India, namely, Northern, Southern, North-Eastern, Eastern and Western regions. Further, to facilitate smooth operation of the National Grid on a real time basis and free uninhibited bulk exchange of power among the regions, the National Load Dispatch Centre at Delhi is being set up.

PGCIL has diversified into Telecom business to utilise spare telecommunication capacity available with its Unified Load Dispatch Centre (ULDC) schemes and leveraging its country-wide transmission infrastructure. It envisages to establish a telecom network of about 20,000 kms., interconnecting about 60 major cities including Metros and all State capitals at a cost of about Rs. 1,000 crore. PGCIL has been able to commission about 18,700 kms of network since approval was accorded by Government in March 2003. The balance network is in an advanced stage of completion.

Under Accelerated Power Development and Reforms Programme (APDRP), PGCIL has been assigned the role of Advisor-cum-consultant to lend its managerial and technical expertise for developing 182 distribution circles / towns / schemes spread over 18 States costing about Rs. 7,820 crore. The Company is also executing APDRP schemes of about Rs. 1,100 crore on deposit work basis under bilateral arrangement on behalf of States like Goa, Bihar, Meghalaya, Uttar Pradesh, Tripura and Gujarat.

During the year 2005-06, PGCIL electrified 2, 682 villages in Bihar, Uttar Pradesh and West Bengal against a target of 2, 625 villages. Quadripartite Agreements were signed amongst State governments, State Utilities, PGCIL and Rural Electrification Corporations (REC) for implementation of the Rajiv Gandhi Grameen Vidyutikaran Yojana(RGGVY) Schemes in 9 (Nine) States involving approx., 87,

300 Villages of 68 Districts at an estimated cost of Rs. 9,400 crore.

RURAL ELECTRIFICATION CORPORATION LIMITED

The Rural Electrification Corporation Limited (REC) was incorporated as a Company under Companies Act, 1956 in 1969 with the main objective of financing rural electrification schemes in the country. The current mission of REC is to facilitate availability of electricity for accelerated growth and for enrichment of quality of life of rural and semi-urban population and to act as a competitive, client-friendly and development oriented organisation for financing and promoting projects covering power generation, power conservation, power transmission and power distribution network in the country.

Objectives : (1) To promote and finance projects aimed at integrated system improvement, power generation, promotion of decentralised and non-conventional energy sources, energy conservation, renovation and maintenance, power distribution with focus on pump-set energisation, the implementation of Government of India scheme for the electrification of all villages and all households by 2009 and other related works in rural and urban areas. (2) To expand and diversify into other related areas and activities like financing of decentralised power generation projects, use of new and renewable energy sources, consultancy services, transmission, sub-transmission and distribution systems, renovation, maintenance and modernisation, etc., for optimisation of reliability of power supply to rural and urban areas, including remote, hill, desert, tribal, riverine and other difficult / remote areas. (3) To mobilise funds from different sources including raising of funds from domestic and international agencies and sanction loans to the State Electricity Boards, State Governments, Power utilities, Rural Electric Cooperatives, Non-Government Organisations (NGOs) and private developers. (4) To optimise the rate of economic and financial returns for its operations while fulfilling the corporate goals viz. (i) laying of power infrastructure; (ii) power load development: (iii) rapid socio-economic development of rural and urban areas, and (iv) technology upgradation. (5) To ensure client satisfaction and safeguard customers' interests through mutual trust and self respect within the organisation as well as with business partners by effecting continuous improvement in operations and providing the requisite services. (6) To assist State Electricity Boards / Power Utilities / State Governments, Rural Electric Cooperatives and other loanees by providing technical guidance, consultancy services and training facilities for formulation of economically / financially viable schemes and for accelerating the growth of rural and urban areas.

Net profit of REC during 2004-05 was Rs. 801 crore the net worth of the company is Rs. 3779 crore and loans disbursed during the year 2004-05 by REC were Rs. 7885 crore.

RAJIV GANDHI GRAMEEN VIDYUTIKARAN YOJANA

A scheme "Rajiv Gandhi Grameen Vidyutikaran Yojana" for Rural Electricity Infrastructure and Household Electrification was launched in April 2005 for the attainment of the National Common Minimum Programme of providing access to electricity to all Rural Household in five years. The scheme would be implemented through the Rural Electrification Corporation (REC).

Under this scheme 90 per cent Capital Subsidy would be provided for projects for: (i) Creation of Rural Electricity Distribution Backbone (REDB) with one 33 / 11 kV (or 66 / 11 kV) substation in every Block, appropriately linked to the State

Transmission System. (ii) Creation of Village Electricity Infrastructure (VEI) for electrification of all un-electrified villages / habitations and provision of distribution transformer(s) of appropriate capacity in every village / habitation. (iii) Decentralised Distributed Generation (DDG) and Supply System from conventional sources for Villages / Habitations where grid supply is not cost effective and where Ministry of Non-Conventional Energy Sources would not be providing electricity through their programme(s).

The scheme inter alia provides for financing of electrification of all un-electrified Below Poverty Line (BPL) households in the country with 100 per cent capital subsidy as per norms of Kutir Jyoti Programme in all rural habitations.

For projects to be eligible for capital subsidy under this scheme prior commitment of the States would be taken before sanction of the projects for: (i) deployment of franchisees for the management of rural distribution in projects financed under this scheme. (ii) provision of requisite revenue subsidy to the State utilities as required under the Electricity Act, 2003.

The States would also be required to make adequate arrangements for supply of electricity and there should be no discrimination in the hours of supply between rural and urban households. The scheme covers the entire country and the funds would be released on the basis of sanction of the projects submitted. It is estimated that Rs.16,000 crore would be required for the entire scheme. For Phase-I of the scheme approved for implementation during the 10th Five-Year Plan Period Rs. 5,000 crore has been provided by the Central Government as Capital subsidy.

As per the new definition of Village Electrification, there are 1,25,000 un-electrified villages. Number of electrified rural households are 60,180,685, i,e., 43.52 per cent as per 2001 census.

Upto 31 March 2006 , 475 project proposals were received out of which 195 were approved at the cost of Rs. 6271.32 crore. NITs for 172 projects were issued and for 125 projects, awards were placed. The approved projects covered 51284 un-electrified villages, 46.29 BPL households. 122 projects in 125 districts were under implementation in 78544 villages and 3686121 rural households.

As on 31 March 2006, 9819 villages were electrified, 810 habitations covered, and 16815 BPL households given connections free-of–charge.

POWER FINANCE CORPORATION LTD.

The Power Finance Corporation Limited was incorporated on 16 July, 1986 and registered as a Non-Banking Financial Institution by Reserve Bank of India in February, 1997. Set up as a Power Sector Financial Institution, the Company has been a dominant player in funding the projects of the State Power Utilities. Over the last 4 to 5 years, the Company has also started playing a major role in funding of Central Sector and Private Power Projects. The Company's loan portfolio of Rs. 35,603 crore as on 31 March 2006 includes various types of Power Projects viz. Generation, Transmission, Renovation and Modernisation, System Improvement, etc. In the Generation segment, the projects funded by the Company include coal-based thermal, gas based thermal, hydro, bio-mass and wind power projects.

The company has recently been identified as the nodal agency for the present development of seven Ultra Mega Power Projects of 4000 MW each in various parts of the country through tariff-based competitive bidding. These include three pit-head based projects which would include development of captive coal mines and

four coastal projects based on imported coal. Each of these projects will be progressively commissioned over the next 5 to 7 years.

The authorised share of the Company is Rs. 2000 crore and paid up capital is Rs. 1030.45 crore. PFC has cumulatively sanctioned Rs. 94, 052 crore and disbursed Rs. 61, 799 crore upto 31 March 2006. During the financial year 2005-06, the Company sanctioned Rs. 22,502 crore and disbursed Rs. 11,681 crore. The post-tax profit is Rs. 970.95 crore for 2005-06. The Company is continuously rated 'Excellent" since its signing MoU with Government of India and received 'MOU Award of Excellence' for FY 2003-04 for being among the 'Top 10 Public Sector Undertakings of the country' from the Hon'ble Vice President of India.

NORTH-EASTERN ELECTRIC POWER CORPORATION LIMITED

With a need to develop the huge power potential the North Eastern Electric Power Corporation (NEEPCO) was incorporated on 2 April 1976 as a wholly owned Government Enterprise under the Ministry of Power to Plan, Promote, Investigate, Survey, Design, Construct, Generate, Operate and Maintain power stations in the N.E. Region. The authorised share capital of the Corporation presently stands for Rs. 3,500 crore. The installed capacity of NEEPCO is 1,130 MW comprising of 755 MW of Hydro Power and 375 MW of gas based power. The Corporation currently meets more than 68 per cent of the energy requirement of the North Eastern Region. It is an ISO:9001:2000(Quality)ISO 14001:1996(environment) and OHSAS-18001:1999 (Safety) Company with its Corporate Office at Shillong.

The Corporation plans to add 1380 MW more during the eleventh five-year plan to its present installed capacity of 1130 MW. Presently, two projects of total capacity of 660 MW are under execution by NEEPCO. During the year 2005-06 NEEPCO generated 5,260 MU of energy which was 7.26 per cent more than was targeted with a break up of 2758 MU from Hydro sector and 2,146 MU in Thermal. The corporation's Sales and receipt were Rs. 838.00 crore and Rs. 934.00 crore respectively for the concluding year 2005-2006 which is 5 per cent and 21 per cent more than the preceding year. The corporation's net profit during 2005-06 is Rs. 204 crore. The corporation already prepared and submitted four DPRs to CEA during 2005-06 and three Projects were taken up for preparation of DPRs during 2006-07 for execution in phases keeping in view the 50,000 MW Hydro Electric initiative launched by the Government of India.

SATLUJ VIDYUT NIGAM LTD.

The successful completion and commissioning of the prestigious 1500 MW Nathpa Jhakri Hydro Power Project in Himachal Pradesh in September 2003 was an important landmark for the Corporation. The Project has already generated 12386 million units (MU)(upto 20 June 2006) of electrical energy as per details given below:-

Year	Generation
2003-04	1116 MU
2004-05	5108 MU
2005-06	4055 MU
2006-07 (upto 20.06.2006)	2107 MU

The Nathpa Jhakri Hydro Electric Project was dedicated to the nation by the Hon'ble Prime Minister of India Dr. Manmohan Singh on 28 May, 2005 in the august

presence of Hon'ble Union Minister of Power at a function presided over by Hon'ble Chief Minister of Himachal Pradesh. After the successful implementation of this Project, SJVN has embarked on a target of becoming 5000 MW multi-project company. It has already taken up six more projects in Himachal Pradesh and Uttaranchal as per details:

Project	Capacity	State
Ranpur HE Project	412 MW	Himachal Pradesh
Luhri HE Project	700 MW	Himachal Pradesh
Khab HE Project	1020 MW	Himachal Pradesh
Devsari Dam HE Project	300 MW	Uttaranchal
Devra Mori HE Project	35 MW	Uttaranchal
Jhakhol Sankari HE Project	33MW	Uttaranchal

The Satluj Jal vidyut Nigam Limited, SJVN (formerly Nathpa Jhakri Power Corporation Limited (NJPC) was incorporated on 24 May 1988 as a joint venture of the Government of India and the Government of Himachal Pradesh (GOHP) with an authorised share capital of Rs. 4500 crore. The debt equity ratio for the Nathpa Jhakri Hydro Electric Project (NJHEP) is 1:1 and the equity – sharing ratio of GOI and GOHP is 3:1 respectively.

All the Units of NJHEP have since been commissioned as detailed below:

Unit	Synchronisation	Commercial Generation
Unit - 5	20 September 2003	06 October 2003
Unit – 6	23 November 2003	02 January 2004
Unit – 4	22 January 2004	30 March, 2004
Unit – 3	13 February 2004	31 March 2004
Unit – 2	09 March 2004	06 May 2004
Unit – 1	31 March 2004	18 May 2004

Project Benefits : Besides the social and economic upliftment of the people in its vicinity, the 1500 MW NJHEPis designed to generate 6950 MW of electrical energy, in a 90 per cent dependable year. It also provides 1500 MW of valuable peaking power to the Northern Grid.

Out of the total energy generated at the Bus Bar, 12 per cent is supplied free of cost to the home state, Himachal Pradesh. From the remaining 88 percent energy generation 25 per cent is supplied to HP at Bus bar rates. The power allocated to different States / UTs of Northern Region by the Ministry of Power is as follows.:

Haryana	64 MW
H.P	547 MW
J&K	105 MW
Punjab	114 MW
Rajasthan	112 MW
U.P.	221 MW
Uttaranchal	38 MW *

Delhi	142 MW
Chandigarh	08 MW
Unallocated quota at MOP disposal	149 MW

* Transferred to Punjab as Uttaranchal was not willing.

The Corporation has bagged a number of awards for environment protection safety and eco-systems. It also has the ISO 9001 certification.

Consultancy Services : SJVN has the experience of corporate and project planning, design, engineering, construction management, erection and commissioning, contracts management, project management, human resource management, financial management and commercial management of India's largest hydro-electric project. To effectively utilise the in-house expertise and the experience gained, a dedicated consultancy division has been established for providing consultancy services to national and international organisations.

TEHRI HYDRO DEVELOPMENT CORPORATION LIMITED

THDC, a joint venture Corporation of the Government of India and Government of U.P., was incorporated in July 1988 as a Limited Company under the Companies Act, 1956, to develop, operate and maintain the Tehri Hydro Power Complex and other Hydro Projects.

The Corporation has an authorised share capital of Rs. 4000 crore. THDC is presently responsible for the implementation of the Tehri Hydro Power Complex (2400 MW), on the river Bhagirathi, comprising of Tehri Dam and Hydro Power Plant (HPP) (1000MW), Koteshwar Hydro Electric Project(HEP) (400MW) and Tehri Pumped Storage Plant (PSP)(1000MW).

The Tehri Stage-I is at an advance stage of completion. Two units of 250 MW each were successfully rolled on 31 March 2006. With this, the commissioning process of Tehri Stage-I Project has started. Generation from the Project was planned to commence from June 2006 onwards. The works of Koteshwar HEP are in progress and the project is scheduled to be commissioned by March 2008. Essential works of Tehri PSP have been taken up alongwith the execution of Tehri Stage-I. Investment approval of Tehri PSP is under process. The Project is envisaged to be completed in 4 years after investment approval.

The Tehri Hydro Power complex (2400 MW) will generate 6200 Million Units of energy annually on its completion (3568 Million Units on completion of Tehri Stage-I) and will provide additional irrigation facility in 2.70 lakh hectares of land besides stabilising existing irrigation facility in 6.04 lakh hectares of land. The project will provide drinking water for 40 lakh people in Delhi and for 30 lakh people in the town and villages of Uttar Pradesh.

The Corporaton is also entrusted with the Vishnugad Pipalkoti Project (444 MW) on river Alaknanda, Kishau Dam and HPP (600 MW) on river Tons (tributary of Yamuna), and 6 other new Hydro Projects in Uttaranchal, totaling to 695 MW. The Government of Uttaranchal (GOUA) has signed an MoU for preparation of Detailed Project Report (DPR) of Vishnugad Pipalkoti Project in April 2003. The Stage-I activities of the project are already complete. A DPR envisaging an installed capacity of 444 MW (4x111) has been submitted to the Central Electricity Authority in March 2006 for Techno-Economic Clearance. The Project is scheduled for commissioning by Year 2011, i.e., during Eleventh Plan. The Government of

Uttaranchal (GOUA) also allocated following Six Projects to THDC for development:

S.No	Name of Projects	Capacity	River	Distt.
1	Karmoli	140MW	Jadhganga	Uttarkashi
2	Gohana Tal	60 MW	Birahiganga	Chamoli
3	Jadhganga	50 MW	Jadhganga	Uttarkashi
4	Malari Jhelam	55 MW	Dhauliganga	Chamoli
5	Jhelam Tamak	60 MW	Dhauliganga	Chamoli
6	Bokang Bailing	330 MW	Dhauliganga (K)	Phithoragarh

Implementation Agreement between THDC and GOUA for above new Projects were signed in November 2005. Investment approval for carrying out Stage-I activities for five Projects excluding Bokang Bailing has been accorded by Government of India in March 2006 and works for Stage-I activities have been taken up.

The Government of Uttaranchal (GOUA) has conveyed “in principle” approval for allocation of Kishau Dam (600 MW) to THDC. The project will generate 1216 MU of power annually, besides providing irrigation (97076 ha.) and drinking water to Delhi (616 MCM). THDC would be taking up the project once issue of the appointment of cost among Power, Drinking Water Supply and Irrigation Components are firmed up and Implementation Agreement / MOU is signed.

BHAKRA BEAS MANAGEMENT BOARD

The Bhakra Beas Management Board (BBMB) manages the facilities created for harnessing the waters impounded at Bhakra and Pong in addition to those diverted at Pandoh through the BSL Water Conductor System. It was also assigned the responsibility of delivering water and power to the beneficiary states in accordance with their entitled shares. The Board is responsible for the administration, maintenance and operation at Bhakra Nangal Projects, Beas Project Unit I and Unit II including Power Houses and a network of transmission lines and grid sub-stations. The Power generation of BBMB power evacuation system running into 3735 circuit km length of 400 KV, 220 KV, 132 KV and 66 KV transmission lines and 24 EHV sub-stations. The installed capacity of BBMB Power plants is 2,866.30 MW. The generation during 2005-06 was 11692 MU.

DAMODAR VALLEY CORPORATION

The Damodar Valley Corporation (DVC), the first multipurpose river valley project of the Government was set up in July 1948 for the unified development of Damodar Valley region spread over the States of Jharkhand and West Bengal. It’s objectives include flood control and irrigation, water supply and drainage, generation, transmission and distribution of electrical energy, both hydro-electric and thermal, afforestation and control of soil erosion, public health and agricultural, industrial, economic and general well-being in the Damodar Valley.

The DVC’s main projects include four dams at Maithon, Panchet, Tilaiya and Konar with connected hydro-electric power stations (except at Konar), thermal power stations at Bokaro ‘A’, Bokaro ‘B’, Chandrapura, Durgapur, Mejia and also one gas turbine station at Maithon. The total existing capacity of DVC power plants, as on April 2006, is 2931.5 MW comprising of 2705 MW thermal, 144 MW hydel and 82.5 MW from gas turbine station. DVC’s transmission network (220 KV and

132 KV) runs to a total length of 4734 circuit kms. The T&D system of DVC is supported by 42 sub-stations, 15 receiving stations and 964 circuit kms. of distribution lines. DVC supplies power at voltage levels of 33 KV, 132 KV and 220 KV to the core sector industries in the region of coal mines, steel plants, railways and other big / medium industries and also to its licensees including State Electricity Boards of Jharkhand and West Bengal. As a constituent of Eastern Regional Grid, DVC is also exporting its surplus power to the deficit regions of the country through the Central Transmission Utility network.

As per the programme of 1210 MW capacity addition by DVC during the Tenth Five-Year Plan, addition of 210 MW (Mejia TPS Unit # 4) has already been achieved in 2004-05 and construction works for another 1000 MW (Mejia TPS Unit # 5&6 – 2x250 MW and Chandrapura TPS Unit # 7&8 – 2x250 MW) are in progress for commissioning during 2006-07. In addition, DVC has also taken up action for refurbishment of its old thermal and hydel units through RLA based R&M / LE. Matching extension, augmentation and strengthening of its transmission and distribution network has also been undertaken by the Corporation.

NATIONAL POWER TRAINING INSTITUTE

The National Power Training Institute, a registered society, an ISO 9001:2000 & ISO 14001 Organisation under the Ministry of Power, is committed to the development of Human Resources in Indian power and Energy Sectors. NPTI operates on an all India basis with its Corporate Office at Faridabad and the Regional Institutes located at New Delhi, Nagpur, Durgapur, Neyveli, Bangalore and Guwahati. NPTI's Corporate Centre and its Institutes are well equipped with world-class hi-tech infrastructural facilities for conducting different courses on technical as well as management subjects. Since its inception, NPTI has shared its engineering and technological expertise through its long-term and short-term training programmes, imparting training to more than 1,11,000 power professionals. Also through its mass awareness programmes or in Energy Conservation, Power Reforms, Electrical Safety, Energy Environmental Linkage, Water for Sustainable Development of Power, etc. over 1,47,000 persons were sensitised across the country.

The NPTI also established high fidelity, Real-Time, Full-Scope 500 MW & 210 MW Fossil Fuel Fired Power Plant Training Simulators imparting training to nearly 8,000 engineers and operators across the country. Also a 430 MW CCGT Replica Simulator has been commissioned at the Corporate Office, Faridabad. A GIS Resource Centre has also been established for Training purposes at Faridabad. Over 40 self-paced, menu-driven, cost-effective multimedia computer-based training packages have been developed and marketed by NPTI.

In its attempts to weave formal education with Industry-oriented inputs, NPTI is conducting (a) A two year MBA in Power Management (b) A four-Year Degree Course in B.Tech / B.E.(Power) and a (c) Post Graduate Diploma in Thermal Power Plant Engineering. These AICTE approved courses have an overwhelming response and the trained manpower is being recruited by various Public / Private Sector Organisations through Campus interviews. Besides these NPTI is also conducting a Post Diploma Course in Thermal power Plant Engineering.

CENTRAL POWER RESEARCH INSTITUTE

The Central Power Research Institute (CPRI) a society registered under the societies Registration Act under the Ministry of Power serves as a national laboratory

to carry out applied research in Electrical Power Engineering. It also functions as an independent National Testing and Certification Authority for Electrical Equipment for ensuring their reliability.

The Institute, with its existence of over four decades has built sophisticated facilities, both in the areas of research and testing. The important facilities include 2500 MVA Short Circuit Testing with Sysnthetic Testing Facility at Bangalore, Ultra High Voltage Research Laboratory at Hyderabad. Short Circuit Testing Facility at Bhopal, Thermal Research Centre at Koradi, Nagpur and Energy Research Centre at Thiruvananthapuram to cater to the R&D and testing needs of the power sector. A state-of-the–art test facility for seismic qualification of power equipment and Real Time Digital Simulation (RTDS) facility have been set up and commissioned.

The CPRI's laboratories are accredited under the National Accreditation Board for Testing and Calibration of Laboratories (NABL), which is the national body for accreditation of laboratories as per ISO / IEC 17025 norms. CPRI's low and medium voltage laboratories are accredited by ASTA BEAB, UK. CPRI has been given the 'observer status' in the group of Short Circuit Testing Liaison(STL) of Europe and is likely to be a full member of this prestigious club. CPRI laboratories are approved for testing for certain products like communication cables, L.T. Capacitors for motors, etc., by Underwriters Laboratories(UL) and Canadian Standard Association (CSA). CPRI is also CBTI, under IEC-EFCB Scheme. CPRI's R&D and Consultancy activities have been granted ISO 9001:2000 Certificates.

Over the years, CPRI has built up expertise in the areas of transmission and distribution systems, power quality, energy metering, energy auditing, transmission line, tower design, conductor vibration studies, power systems instrumentation, transformer oil reclamation and testing, diagonostic studies, condition monitoring and estimation of remaining life of equipment, new material for power system application, UHV testing, short circuit testing, HV testing, seismic qualification of equipment and other related fields. CPRI offers consultancy services in these areas. The Institute works as a nodal agency for national level power system research. Among the new ventures of the CPRI, the Centre for Collaborative and Advanced Research (CCAR) has been established for creating infrastructure for the visiting Scientists / Technologists to carry out research in the areas of power sector. The other important facility currently added is for showcasing of all available technologies for Industrial Solid Waste Utilisation. The Institute is creating testing facilities at Kolkata and Guwahati to cater to the testing requirements in the Eastern and North Eastern States of the country, with the infrastructure assistance from WBSEB and ASEB. The other new facility being established included a labeling laboratory for air conditioners and refrigerators". CPRI is expanding its services to other Asian and African countries and is executing many consultancy and testing jobs.

BUREAU OF ENERGY EFFICIENCY

Recognising the fact that the efficient use of energy and its conservation are least-cost options to meet the increasing energy demand, the Government of India enacted the Energy Conservation Act-2001 and established the Bureau of Energy Efficiency (BEE) under the Ministry of Power in March 2002. The Act provides for institutionalising and strengthening the delivery mechanism for energy efficiency services in the country and provides the much needed coordination between the various entities. The mission of the Bureau of Energy Efficiency is to develop policies and strategies based on self-regulation and market principles, within the overall

frame work of the Energy Conservation Act (EC Act), 2001 so as to finally reduce the energy intensity of the Indian economy. The aim is to have the active participation of all stakeholders, resulting in the accelerated and sustained adoption of energy efficiency in all sectors.

Under the National Energy Conservation Award Scheme-2005, 311 participating industrial units saved Rs 9890 million against an investment of Rs 13160 million on account of implementation of various energy conservation measures. Electricity savings resulted in avoided capacity equivalent to 250 MW. Savings of 865 MW as equivalent avoided capacity has been achieved during the period 1999-2005 through the National Energy Conservation Award Scheme.

On 14 December 2004, the Hon'ble Prime Minister of India, Dr. Manmohan Singh launched the "National Campaign on Energy Conservation ", under which various measures / activities were undertaken / formulated during 2005 by the Bureau of Energy Efficiency. Participating in this Campaign were various Industries, Schools, Public Sector Units, State Governments, Designated Agencies, etc. As a part of the national campaign, the Hon'ble Prime Minister also released a postage stamp on energy conservation. A painting competition was conducted for school children for 4th and 5th standards, at School, State and National Level as a part of the Campaign to sensitise the issue. The prize winning students at the national level received prizes from the Hon'ble President of India, Dr. A.P.J. Abdul Kalam on the National Energy Conservation Day Function held on 14 December 2005.

The encouraging response received for the campaign in 2005 made the Ministry enter the National Campaign for the year 2006. On 18 May 2006, the "National Energy Labeling Programme" was finally launched.

CENTRAL ELECTRICITY REGULATORY COMMISSION

The Central Electricity Regulatory Commission (CERC) an independent statutory body with quasi-judicial powers, was constituted on 25 July 1998 under the Electricity Regulatory Commissions Act, 1998 and has been continued under the Electricity Act, 2003. The Commission consists of a Chairperson and four other Members including the Chairperson, CEA as the ex-officio Member.

STATE ELECTRICITY REGULATORY COMMISSIONS

Many State Electricity Regulatory Commissions (SERCs) have been established under the provisions of the ERC Act, 1998 or under respective State Reforms Acts. These SERCs have been continued under the provisions of Electricity Act, 2003.

State Reforms Acts : Orissa, Haryana, Andhra Pradesh, Uttar Pradesh, Uttaranchal, Karnataka, Rajasthan, Madhya Pradesh, Delhi and Gujarat have enacted their State Electricity Reforms Acts, which provide, inter-alia, for unbundling / corporatisation of SEBs, setting up of SERCs, etc. The SEBs of Orissa, Haryana, Andhra Pradesh, Karnataka, Uttar Pradesh, Uttaranchal, Rajasthan, Delhi, Assam Tripura, Gujarat, Madhya Pradesh and Maharashtra have been unbundled / corporatised. Distribution was privatised in Orissa and Delhi

So far twenty five states viz, Orissa, Haryana, Andhra Pradesh, Uttar Pradesh, Karnataka, West Bengal, Tamil Nadu, Punbjab, Delhi, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan, Himachal Pradesh, Assam, Chhattisgarh, Uttaranchal, Goa, Bihar, Jharkhand, Kerala, Tripura, Sikkim, Jammu & Kashmir and Meghalaya have either constituted or notified the constitution of SERCs. A Joint Electricity Regulatory Commission (JERC) has been notified for Mizoram and Manipur. A JERC has also

been notified for Union Territories (except Delhi).

Twenty SERCs viz. Orissa, Andhra Pradesh, Uttar Pradesh, Maharashtra, Gujarat, Haryana, Karnataka, Rajasthan, Delhi, Madhya Pradesh, Himachal Pradesh, West Bengal, Punjab, Tamil Nadu, Assam, Uttaranchal, Jharkhand, Kerala, Chhattisgarh and Tripura have issued tariff orders.

Reorganisation of State Electricity Boards (SEBs) : The Central Government has agreed for continuation of the SEBs of 11 States after considering their respective requests in this regard upto 9 June 2006 except for Bihar for which extension has been given upto 9 September 2006. Of the eleven states, Madhya Pradesh and Assam have carried out the re-organisation except for the area of trading of electricity for which extension upto 9 June 2006 has been agreed to.

Appellate Tribunal for Electricity : The Appellate Tribunal for Electricity, established by the Central Government under Section 110 of the Electricity Act, 2003 has been operationalised. The headquarters of the Appellate Tribunal is at Delhi. The Tribunal has started hearing appeals against orders of the Regulatory Commissions / Adjudicating Officers.

Electricity Rules, 2005 : The Central Government has notified Electricity Rules, 2005 on 8 June 2005 which carry provisions related to Captive Generating Plants, Consumer Redressal Forum and Ombudsman, Tariff of Generating Companies, etc. Nine Removal of Difficulties Orders regarding inclusion of measures to control theft in Electricity Supply Code, etc., have been issued by the Central Government under Section 183 of the Electricity Act, 2003.

Tariff Policy : A Tariff Policy has been notified by Government of India under the provisions of section 3 of the Electricity Act, 2003.

The objectives of the tariff policy are to : a) Ensure availability of electricity to consumers at reasonable and competitive rates; b) Ensure financial viability of the sector and attract investments; c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimise perceptions of regulatory risks; d) Promote competition, efficiency in operations and improvement in quality of supply.

Guidelines for procurement of electricity : In compliance with section 63 of the Electricity Act, 2003, the Central Government has notified guidelines for the procurement of power by Distribution Licensees through competitive bidding. The Central Government has also issued the standard bid document containing RFQ, RFP and model PPA for long-term procurement of power from projects that have specified site and location.

Forum of Regulators : The Forum of Regulators has been constituted under sections 166 (2) & (3) of the Electricity Act, 2003.

The Forum shall discharge, inter-alia, functions viz. analysis of tariff orders and other orders of CERC and SERCs and compilation of data arising out of the said orders, highlighting, especially the efficiency improvements of the utilities, laying of standards of the performance of licensees, evolving measures for protection of interest of consumers and promotion of efficiency, economy and competition in the power sector.

Regional Power Committees : Regional Power Committees have been constituted under the provision of section 2(55) of the Act for facilitating integrated operation of the power system in respective regions on 29 November 2005.

PETROLEUM AND NATURAL GAS

The Ministry of Petroleum and Natural Gas is entrusted with the responsibility of exploration and production of oil and natural gas including import of Liquefied Natural Gas (LNG), and the refining, marketing, distribution, import, export and conservation of petroleum products.

Considering the oil demand scenario vis-a-vis domestic production level, the Government is encouraging oil sector PSUs to venture abroad to access exploration blocks and oil producing properties for equity oil either on its own or through strategic alliances / joint ventures.

India is a member of the International Energy Forum (IEF) which provides a platform for biennial meetings of the Ministers from the energy producing and consuming countries. This forum was earlier known as "Producer-Consumer Dialogue" between the oil producing and consuming countries. The permanent secretariat of the IEF is in Riyadh. The mission of the secretariat is to further strengthen and enhance the process of global dialogue on energy at the political level.

CRUDE OIL AND NATURAL GAS PRODUCTION

Oil and Natural Gas Corporation Limited (ONGC) and Oil India Limited (OIL), the two National Oil Companies (NOCs) and private and joint venture companies are engaged in the Exploration and Production (E&P) of oil and natural gas in the country. Crude oil production during 2005-06 was 32.190 MMT by ONGC, OIL and Private / joint venture companies.

The natural gas production during the year 2005-06 was 32.202 BCM (Billion Cubic Metres) from ONGC, OIL and Private / joint venture companies.

In the last five years, the Government has made concerted efforts for enhancing "Energy Security". The Tenth Five-Year Plan formulated thereunder represented a paradigm shift over earlier plans in as much as exploration areas were decided to be awarded through international competitive bidding in a deregulated scenario. Since 1991, Government of India has been inviting bids on a regular basis with several rounds of bidding carried out till operationalisation of New Exploration Licensing Policy (NELP).

After the operationalisation of NELP under the first five rounds (spanning 2000-2005), Production Sharing Contracts (PSCs) for 110 blocks have been signed. Further the sixth round of the NELP (NELP-VI) was opened in February 2006 for International bidding by offering 55 exploration blocks, i.e., 25 Inland, 6 shallow offshore and 24 deep water blocks covering sedimentary area of about 3.52 lakh Sq. Km.

IMPORT/EXPORT OF CRUDE OIL AND PETROLEUM PRODUCTS

The total quantity of Crude Oil and Petroleum products imported during the year 2005-06 was 99.409 MMT and 11.677 MMT valued at Rs. 171, 702 crore and Rs. 25,575 crore respectively. In the same year 21.505 MMT of Petroleum products valued at Rs. 46.785 crore were exported.

During the year 2005-06, the public sector refineries purchased crude oil on term contract and spot basis. The countries from 'where the term contract purchases were made included Saudi Arabia, Kuwait, UAE, Iran, etc.

COAL BED METHANE

Coal Bed Methane is an environment-friendly clean fuel similar to conventional natural gas. In order to explore and produce new sources of natural gas from coal bearing areas, Government had formulated a CBM policy providing attractive fiscal and contractual framework for exploration and production of CBM in the country. The Government has also offered 10 blocks under CBM-III for exploration and production of CBM. The Government has so far signed 16 contracts for exploration and production of CBM. First commercial production of CBM in the country is expected to commence in 2007-08.

OIL AND NATURAL GAS CORPORATION LIMITED

The Oil and Natural Gas Commission was established on 14 August 1956 as a statutory body under Oil and Natural Gas Commission Act for the development of petroleum resources and sale of petroleum products. As per the decision of the Government, the ONGC was converted into a Public Limited Company under the Companies Act, 1956 and named as "Oil and Natural Gas Corporation Limited" from 1 February 1994. In March 2004, the Government has disinvested around 10 per cent of the equity shares of ONGC through a public offer in the domestic capital market at Rs. 750 per share. The present shareholding of ONGC as on 31 March 2006 is as follow:

GOI	—	74.14 per cent
PSUs	—	12.01 per cent
FLS / MFs	—	3.12 per cent
Flls	—	8.43 per cent
Others	—	2.30 per cent

ONGC VIDESH LIMITED

'Hydrocarbons India Limited' formed in 1965 as a subsidiary of ONGC was Shri K. D. Malaviya's brainchild to give India succour by getting oil from abroad. It was renamed as OVL (ONGC Videsh Limited) in 1989. Today it participates in 21 projects in 13 countries, namely, Vietnam, Russia, Sudan, Iran, Iraq, Libya, Myanmar, Syria, Qatar, Cuba, Egypt, Brazil and Nigeria. OVL has a 25 per cent interest in the Greater Nile Oil Project in Sudan, which is an onshore crude oil production area, consisting of three blocks. ONGC Videsh Limited (OVL) is currently producing Oil & Gas from its Sudan (Greater Nile Oil Project), Vietnam, Syria and Russia (Sakhalin-1) assets. OVL's investment commitment overseas stands at USD 4.5 billion. This makes OVL the biggest Indian multinational corporate. Now OVL has become the 2nd largest E&P Company in India, after ONGC. OVL's production of oil plus oil equivalent gas (O+OEG), together with its wholly-owned subsidiary ONGC Nile-Ganga B.V., increased from 0.252 MMT in 2002-03 to 3.868 MMT during 2003-04 to 6.34 MMT during 2005-06.

OVL's efforts have been supported wholeheartedly by the Government of India, which has allowed OVL exclusive empowerment by providing a single window clearance for overseas upstream projects. OVL has been designated as the Indian Nodal Agency for overseas petroleum business and is maintained as a permanent participant in all bilateral interactions and Joint Working Groups of the Ministry of Petroleum and Natural Gas

OIL INDIA LIMITED

Oil India Limited (OIL), under the administrative set-up of the Ministry of Petroleum and Natural Gas, is a National Oil Company engaged in the exploration, production and transportation of crude oil and natural gas in the country. OIL was incorporated in 1959 as a company with a two-third shares of Burmah OIL Company and one-third share of Government of India. In 1961, OIL became a joint venture company with equal share of Government of India and Burmah OIL Company. On 14 October 1981, OIL became a Government of India Enterprise, a wholly-owned Public Sector Undertaking. OIL has operational areas in the States of Assam, Arunachal Pradesh, Orissa, Uttar Pradesh, Uttaranchal and Rajasthan.

Crude and natural gas production by OIL in the last two years and target for the current year of 2006-07 are as under:

	2004-05 (Actual)	2005-06 (Actual) Target	2006-07 MOU To BE
1. Crude Oil Production (MMT)	3.196	3.233	3.50
2. Natural Gas Production (BCM)	2.009	2.27	2.365

OIL was awarded a total of 14 NELP blocks in I to V rounds of bidding- as operator in 6 blocks and with Participating Interests in the balance 8 blocks. Majority of these blocks are in the Phase-I of exploration, while in 2 blocks with OIL as operator, Phase-II works are in progress. Drilling of 1 well in NELP-III Block No. RJ-ONN-2001/1 in Rajasthan has since been completed by OIL. So far, discovery of hydrocarbons has not been made in any of these 14 NELP blocks.

GAIL INDIA LIMITED

GAIL (India) limited, a 'Navratana' enterprise was established in the year 1984 and is India's principal nature gas transmission and marketing company with activities expanding to Gas processing for fractionating LPG, Propane, SBP Solvent and Pentane: transmission of Liquefied Petroleum Gas (LPG): Petrochemicals like HDPE and LLDPE; leasing bandwidth in Telecommunications. The company has extended its presence in Power, Liquefied Natural Gas (LNG) re-gasification, City Gas Distribution and Exploration and Production through equity and joint ventures participations. The current holding of Government of India in GAIL, is 57.35 per cent.

GAIL owns and operates a network of over, 5,340 km of natural Gas high pressure trunk pipeline with a capacity to carry 118 MMSCMD of natural gas across the country. It has a capacity to transport 3.8 MMTPA of LPG.

Its gas-based integrated petrochemicals plant at Pata, Uttar Pradesh has a capacity of producing 4,00,000 TPA of Ethylene and 3,10,000 TPA of Polymers, i.e., HDPE and LDPE. It is also involved in setting up a gas distribution network in the cities for supply of natural gas to households, commercial users and for the transport sectors. GAIL has also been operating its state-of-art telecommunication network. GAILS's telecom business unit- 'GAILTEL' which has approximately 13,000 km network, offers highly dependable bandwidth for telecom service providers in the states of Rajasthan, Gujarat, Madhya Pradesh, Maharastra, Uttar Pradesh, Andhra Pradesh, Haryana, Punjab and Delhi. The first to become operational is the Delhi-

Mumbai route. GAILTEL has become a formidable force today. It's North-West-Central network corridor accounts for 65 per cent of India's long distance traffic. Currently, the company is involved in exploration activities over an acreage of over 83,600 sq kms and plans to invest approximately Rs 800 crore in E&P activities over the next three years.

GAIL now holds a participating interest between 10 to 80 per cent in 16 exploration blocks. Of these, 7 are on-land blocks and 9 are offshore blocks. In India there 13 blocks which are in Basins such as Mahanadi, Bengal, Gujarat- Saurashtra, Mumbai, Cambay, Assam- Akaran and Cauvery. Further more, GAIL has also got a stake in the A-1 and A-3 blocks in Maynmar and block no. 56 in Oman. The various consortium partners of the company in the 16 blocks are ONGC, GSPC, Gazprom, Oil, IOC, Hardy Exploration and Production, Enpro Finance Private Ltd., ENI India Limited, Jubiliant, GGR Canada, Daewoo, OVL, Korea Gas Corporation, Oliex, Videocon, BPCL and HPCL.

Apart from its globalisation programme, GAIL has already obtained equity participation in three retail gas companies in Egypt, viz, Fayum Gas Company, NATGAS and Shell CNG, Egypt and also acquired 7.5 per cent equity in China. GAIL has a participating interest in 2 blocks in Myanmar and in one onland block in Oman. GAIL (Singapore) Pvt Ltd in Singapore is looking after GAIL's overseas ventures.

CONSERVATION OF PETROLEUM PRODUCTS

After coal, petroleum products remain the primary energy source in India, with their consumption increasing at a very steep rate. For faster development, the role of energy sector is of paramount importance. India is at present one of the least energy efficient countries in the world with an identified scope of reducing energy consumption by 20-30 per cent in all major sectors through conservation measures. The spiraling prices of crude oil in the recent past have made all the developing economies adopt a cautious approach for the judicious utilisation of the already strained resources. The Petroleum Conservation Research Association (PCRA) set up as a registered society under the Ministry of Petroleum and Natural Gas in 1978 has been given the mandate to promote conservation of petroleum products in the major sectors of economy like transport, industry, households and agriculture through direct technical assistance, R&D, educational and training programmes, and mass awareness campaigns. PCRA's activities cover conservation of all energy sources, development, evaluation and commercialiasation of efficient equipment and additives, popularising petro-crop cultivation and production of bio-fuels, environment protection, etc. Under the new initiatives / thrust areas PCRA has taken up the promotion of bio-fuels, and urban energy management. Initiatives were also taken for the production of Jatropha based diesel in the rural sector.

REFINING

The refining capacity in the country as on 1 April 2006 was 132.468 million metric tonnes per annum (MMTPA). At present, there are 18 refineries operating in the country (17 in the Public Sector and one in the Private Sector). Out of 17 Public Sector refineries, 7 are owned by Indian Oil Corporation Ltd. (IOCL), two each by Chennai Petroleum Corporation Limited (a subsidiary of IOCL), Hindustan Petroleum Corporation Limited and Oil & Natural Gas Corporation Ltd., one each by Bharat Petroleum Corporation Ltd.(BPCL), Kochi Refineries Limited (a subsidiary of BPCL), Numaligarh Refinery Limited (a subsidiary of BPCL), and Bongaigaon

Refinery and Petrochemicals Ltd. (a subsidiary of IOCL). The private sector refinery belongs to Reliance Industries Limited.

COAL

Coal is the main source of energy in the country and accounts for about 67 per cent of the country's commercial requirement. It is also an essential input in steel and carbo-chemical industries.

COAL RESERVES

As a result of exploration carried out down to a depth of 1200m by the Geological Survey of India and other agencies, a cumulative total of 2,53,300 million tonnes of coal resources have been estimated in the country as on 1 January 2006.

The state-wise distribution of coal resources and its categorisation are given in table 11.1 :

TABLE 11.1 : STATE-WISE DISTRIBUTION OF COAL

State	Coal Resources in Million Tonnes			
	Proved	Indicated	Inferred	Total
Andhra Pradesh	8403	6158	2584	17145
Arunachal Pradesh	31	40	19	90
Assam	315	27	34	376
Bihar	0	0	160	160
Chhattisgarh	9570	27433	4439	41442
Jharkhand	36148	31411	6339	73898
Madhya Pradesh	7565	9258	2935	19758
Maharashtra	4653	2432	1992	9077
Meghalaya	117	41	301	459
Nagaland	4	1	15	20
Orissa	16911	30793	14295	61999
Uttar Pradesh	766	296	0	1062
West Bengal	11383	11879	4553	27815
Total	95866	119769	37666	253301

PRODUCTION

Coal production during 2005-06 was provisionally 282.42 million tonnes of which Coal India Limited (ClL) produced 241.72 million tonnes, Singareni Collieries Company Limited (SCCL) 24.54 million tonnes and Captive collieries 16.17 million tonnes.

In the year 2000 a new Colliery Control Order, 2000 was promulgated which deregulated price-fixation of all grades of coal from 1 January 2000. Coal is distributed on the basis of linkages / sponsorship. Short-term linkages of important sectors like power and cement are decided on a quarterly basis by a Standing Linkage Committee set up by the Government. Linkages to non-core sector consumers are within the purview of Coal India Limited (ClL). As per the new coal sale policy for non-core sectors these linkages are to be replaced by Fuel Supply Agreements (FSAs)

between the coal companies and consumers. Offtake of coal during 2004-05 and to 2005-06 to major sectors of the economy is give in table 11.2 :

TABLE 11.2 : OFF-TAKE OF COAL FROM CIL, SCCL AND OTHERS

(All India)

(million tonnes)

Year	Power	Steel[2]	Loco	Cement	Fertilizer	Others	Total
2004-05	303.89	17.51	0.00	14.70	2.18	36.22	374.50
2005-06[1]	219.83	13.56	0.00	11.27	1.98	38.39	285.03

[1] Provisional

[2] Figures Excluding Exports and Meghalaya Coal

PROJECTS AND PLANNING

The coal projects costing up to Rs 100 crore can be sanctioned by the Board of Directors of Coal India Limited (ClL), and coal projects costing up to Rs 50 crore can be sanctioned by the Board of Directors of Northern Coalfields Limited (NCL), Western Coalfields Limited (WCL), South Eastern Coalfields Limited (SECL), and Mahanadi Coalfields Limited (MCL) subject to certain conditions

As on 31 December 2005, out of a total of 445 mining projects of Coal India Limited (CIL) each costing Rs 2 crore and above, 332 projects stand completed (including projects where coal reserves have since been exhausted). Out of the remaining 113 projects under various stages of implementation, 81 are on schedule and 32 are delayed. In Singareni Collieries Company Limited (SCCL), out of a total of 95 mining projects, 56 have been completed and of the remaining 39 projects, 31 are on schedule and 8 are delayed.

At the Government level, ongoing projects each costing Rs 20 crore and above are being monitored. As on 31 December 2005, there are 108 such projects (mining and non-mining) under implementation in CIL, SCCL and Neyveli Lignite Corporation Limited (NLC). With a sanctioned capital of Rs 17134.94 crore the capacity of these 108 projects is 157.55 million tonnes per year.

COAL CONSERVATION

Conservation of coal enjoins maximum recovery of in-situ reserves of coal. The aspect of conservation of coal is taken into account right from the planning stage and maximum recovery is ensured during the implementation stage.

Mechanised opencast mining is presently the commonly adopted technology for extraction of thick seams at a shallow depth. This is also important from the conservation point of view since the percentage recovery by this technology is much higher. The dominance of this technology can be understood from the fact that it now contributes more than 80 per cent of the total coal production. This trend is likely to continue in the near future too. Further, the thick seams, which were earlier developed by Board and Pillar method or other methods of underground mining and had been standing on pillars for long in the absence of a suitable technology for extraction, have now in many cases become extractable by opencast method of mining with HEMM equipment of a suitable type in some mines of WCL, BCCL, CCL and ECL under shallow cover.

In case of underground mining, the introduction of mechanisation has resulted

in an increased percentage of extraction thereby leading to better conservation of coal.

Longwall and continuous mining technology yields higher percentage of recovery (70 per cent to 80 per cent) with higher rate of output compared with other methods of underground mining. These methods have been implemented in some mines of Coal India Limited as well as of SCCL. However, due to difficult geo-mining conditions prevalent in India, a large-scale adoption of longwall technology has not been possible.

With the improvement in roof support technology using mechanised bolting with resin bolts, it has been possible to maintain a wider gallery span and extract seams under bad roof conditions more efficiently resulting in improved conservation of coal.

The Coal Conservation and Development Act, 1974 provides for the imposition of excise duty on coal despatches for meeting the needs of activities like conservation of coal, development and development of coal mines, execution of stowing and other operations for the safety in coal mines and research work connected with conservation and utilisation of coal, etc and assistance in mining operation.

SAFETY AND WELFARE

Special efforts to improve the standard of safety in the coal industry have brought down the rate of fatalities per million tonne of output in Coal India Limited from 2.62 in the year 1975 to 0.28 in the year 2005. A Standing Committee on Safety regularly reviews safety standards in coal mines.

Coal India Limited had 4.73 lakh, employees as on 1 January 2005 and the coal industry employs over seven lakh workers. Since the nationalisation of coal-mines, welfare of coal miners by way of providing facilities like housing, water supply, medical care, education, etc., is being given greater attention.

LIGNITE

Lignite reserves in India have been estimated at around 36,009 million tonnes as on 1 January 2004. Out of this, 4,150 million tonnes is in the Neyveli area of the Cuddalore district in Tamil Nadu of which about 2,360 million tonnes has been proved. Geological reserves of about 1,168 million tonnes of lignite have been identified in Jayamkondacholapuram of the Trichy district in Tamil Nadu. In Mannargudi and East of Veeranam (Tamil Nadu) geological reserves of around 22,661.62 million tonnes and 1,342.45 million tonnes of lignite have been estimated respectively. Lignite reserves have been identified in Rajasthan, Gujarat, Jammu and Kashmir and Kerala to the extent of 3485 million tonnes, 1816 million tonnes, 128 million tonnes and 108 million tonnes respectively.

Lignite reserves at Neyveli are exploited by Neyveli Lignite Corporation Limited (NLC). Incorporated as a private limited company in 1956, NLC was wholly owned by the Government and converted into a public limited company with effect from 7 March 1986. Over the years, it has acquired considerable expertise and has established itself as a premier organisation in the field of lignite-mining and lignite based power generation. The NLC is an integrated complex consisting of three lignite mines and three thermal power stations.

During 2004-05 (December 2005), NLC produced 116.11 lakh tonnes of lignite and 16,497 Kw Hr of power.

In the year 2005-06 NLC also received an ISO certification for quality management system [ISO 9001 : 2000].

NON-CONVENTIONAL ENERGY SOURCES

The importance of renewable energy was recognised in the country in the early 1970s. India has today many large programmes for renewable energy. Several renewable energy systems and devices are now commercially available. The Ministry of Non-conventional Energy Sources (MNES) is the nodal Ministry of the Government for all matters relating to new and renewable energy systems and devices. The renewable energy programmes cover the entire gamut of technologies, including biogas plants, biomass gasifiers, solar thermal and solar photovoltaic systems, wind mills, co-generation, small hydro plants, energy recovery from urban / municipal and industrial wastes, geothermal energy, hydrogen energy, electric vehicles and bio-fuels among others. Marketing outlets, namely, "Akshay Urja Shops" have been set up in 104 major cities and towns with a view to promote sales, servicing and repair of these systems and devices. Over 8095 MW of grid-connected renewable power capacity has been installed mainly through wind, small hydro and bio-energy which account for around 6.5 per cent of the total installed capacity in the country. In addition, over one million solar lighting systems, one million sq. m collector area of solar water heating systems, 3.7 million biogas plants and several other renewable energy systems and devices have been deployed all over the country.

Over the last two decades, considerable expertise has been gained by different stake-holders such as State Nodal Agencies, State Electricity Boards, NGOs and industries, etc., in planning and implementation of renewable energy projects. However, a lot more needs to be done to make available renewable energy at an affordable price to the common man. It is imperative to take further steps to make the people aware about the potential of renewable energy and availability of various systems and devices to make them less dependent on fossil oils. A White Paper on "Transitioning to a Renewable Energy Future" prepared by the International Solar Energy Society has stated the following:

> "The renewable energy transition will happen city-by-city, region-by-region, country-by-country. It will be a process generated in each locale when a "critical mass" of the application of renewable resources has been reached. These turning points happen when people, governments, regulators, utilities, and the financial community have all become familiar with the technology. The renewable energy transition must start now or it will be too late. Governments, cities, companies and people must cooperate in moving it".

A manufacturing infrastructure has emerged for the manufacture and supply of non-conventional energy equipments. These include small-scale and medium / large-scale industries, both in the public as well as the private sectors. Technical guidance and help has been provided to some developing countries for the construction of biogas plants. Products, which are being exported, mainly include solar photovoltaic modules and systems. Wind turbine components have been exported to Europe, Australia and the USA. A Swiss company has used Indian designs for the manufacture of small gasifiers.

ACHIEVEMENTS

During the last two decades, several renewable energy technologies have been deployed in rural and urban areas. Some of the achievements are given in Table

11.3 along with the estimated potential:

TABLE 11.3 : RENEWABLE ENERGY POTENTIAL AND ACHIEVEMENTS

Sl. No.	Source/System	Estimated Potential	Achievements (as on 31 March 2006)
A.	**Power from Renewables**		
1.	Solar Photovoltaic Power	5,000 MW	2.74 MW
2.	Wind Power	45,000 MW	5,310.40 MW
3.	Small Hydro Power (up to 25 MW)	15,000 MW	1,826.43.63 MW
4.	Biomass/ Power Cogeneration	66,000 MW*	912.53 MW
5.	Biomass Gasifier	-	1.00 MW
6.	Energy Recovery from Wastes	7,000 MW	34.95 MW
	Power from Renewables (Total)	1,83,000 MW	8,088.05 MW
B.	**Decentralised Energy Systems**		
7.	Family-Type Biogas plants	120 lacks	3.84 million
8.	Solar Photovaltaic Systems	20 MW/sq km	
	i. Solar Street Lighting Systems	-	54,795 Nos.
	ii. Home Lighting Systems	-	3,42,607 Nos.
	iii. Solar Lanterns	-	4,78,058 Nos.
	iv. SPV Power Plants	-	1566 kWp
9.	Solar Water Heating Systems	140 million sq m Collector area	1.5 million sq m Collector area
10.	Solar Cookers	-	6 lakhs
11.	Solar PV Pumps	-	7015 Nos.
12.	Wind Pumps	-	1111 Nos.
13.	Hybrid Systems	-	484.68 kW
14.	Battery Operated Vehicles	-	212 Nos.

sq k = Square Kilometer Sq m = Square Meter MW = Mega-watt
KW = Kilowatt
kWp = Kilo watt peak *Including Biomass Gasifier

RURAL ENERGY

Around 3.84 million family size biogas plants have been installed so far. India is second only to China in these two applications. In addition, enriched organic manure is produced from biogas plants to supplement and complement environmentally degrading chemical fertilizers.

National Biogas Programme : Biogas is an alternate source of fuel derived mainly from organic wastes available abundantly in various forms. Biogas obtained from the biogas plants through anaerobic digestion contains a mixture of methane (55 – 65 per cent), carbon dioxide (35-40 per cent) and traces of other gases. The National Biogas Programme was initiated in 1981-82 for the promotion of family size biogas plants with the aim of providing a clean and cheap source of energy along with

GRAPH

other benefits such as enriched organic manure, improved sanitation and hygiene and reduction in drudgery for women. Three types of biogas designs, namely, the floating drum type or KVIC design, fixed dome type and bag type portable digester made of rubberised nylon fabric are being propagated under this programme. Biogas can be offered as an excellent fuel for many energy applications, i.e., cooking, lighting and motive power among others.

The biogas programme is implemented through the State Governments and administrations, corporate / registered bodies, KVIC and non-governmental organisations. Technical Back-up Units (TBUs) set-up at nine locations are providing technical and training support in a decentralised mode. Commercial and co-operative banks are providing loans for the setting up of biogas plants. About 5,400 family type biogas plants were set up during 2005-06. R&D programmes aim to bring down the cost of biogas plants as also to develop technology for use in cold climatic regions of the country. The technical feasibility of introducing a programme on biogas based power generation has been carried out. The programme is proposed to be launched during the current financial year.

Integrated Rural Energy Programme : The Integrated Rural Energy Programme (IREP) aims at undertaking energy planning for meeting the energy needs of cluster of villages through a blend of conventional and non-conventional sources of energy. Earlier, the programme was implemented by taking the Block as a unit of planning and 860 Blocks were covered till 2002-03. The programme was modified in 2003-04. Now it envisages preparation of energy plans for a cluster of villages, district and the State, besides implementation in the selected cluster of villages. As on March 2006, the modified IREP Programme is being implemental in 21 States / UTs and 312 districts have been covered under the programme. Five Regional Training Centres set up under the programme at Delhi, Lucknow, Amrol (Gujarat), Bangalore and Shillong meet the training requirements of different target groups involved in planning and implementation of IREP.

Remote Village Electrification : The Remote Village Electrification programme of the Ministry, under implementation since 2001-02, has now been aligned with the Rajiv Gandhi Grameen Vidyutikaran Yojana announced by the Ministry of Power in April 2005. Those remote census unelectrified villages and remote unelectrified hamlets of electrified census villages, where electrification through grid-connectivity will either not be feasible or not cost effective, will be electrified through non-conventional energy sources under the Ministry's programme. The task of identification of remote villages and hamlets was entrusted to the Rural Electrification Corporation during 2005-06. The REC has so far identified 2388 villages / hamlets in 14 States for coverage through non-conventional energy sources.

During 2005-06, the Ministry sanctioned support for providing SPV homelighting systems in 936 villages in 11 states. In addition, support for electrification of another 20 villages through small hydro projects was also sanctioned in Himachal Pradesh during the year. The cumulative number of villages and hamlets taken up under the programme a since its inception reached 3992 and 1317 respectively, out of which 2237 villages and 594 hamlets have been completed. The target for the 10th Plan period has been set at electrification of 5000 unelectrified villages.

The programme is implemented through the State Governments and the State implementing agencies identified by them. In addition, to the support for installation

of electrification systems, financial assistance is also provided for creation of awareness, training, detailed surveys and technology development, etc.

Village Energy Security Programme : The Ministry had evolved a concept of providing energy security in villages mainly through biomass, and an Outline Plan on Village Energy Security is being taken up in remote villages and hamlets that are not likely to be electrified through conventional means, with emphasis on forest fringe and tribal villages, so as to demonstrate the techno-economic parameters, provide operational experience, mobilise local communities and firm up the institutional arrangements as projected in the Outline Plan.

(i) The objective of the village energy security test projects is to go beyond electrification per se by meeting the total energy requirements of villages including cooking, lighting and motive power, with full participation of the local communities, including women. The projects would be environment-friendly and create avenues for local employment, thus improving the quality of life and leading to overall sustainable development.

(ii) A total of 200 test projects are planned to be taken up upto March 2007. 24 test projects were taken up during 2004-05 in the three States of Madhya Pradesh (11), Rajasthan (6) and West Bengal (7). Another 60 projects were sanctioned during 2005-06 in 10 States, namely, Andhra Pradesh (3), Assam (14), Chhattisgarh (9), Gujarat (3), Jharkhand(1), Madhya Pradesh (4), Maharashtra (7), Orissa (10), Tamil Nadu (4) and Uttaranchal (5), taking the total number of test projects to 84. The remaining projects are planned to be taken up during the current year. Two projects in Madhya Pradesh were completed during 2005-06.

(iii) The first project at Kasai Village in Betul District of Madhya Pradesh was dedicated on 29 October 2005. The energy production unit for the 73 families living in 55 houses comprises of two 10 KW biomass gasifiers and engine-gensets, which will provide electricity for various requirements in the village. To start with, two light points have been provided for each house. Ten street lights have been provided as also lights for the school and engine room. A flour mill has been energised and a water pump and milk chilling unit are also proposed. A few households have started to use music systems and televisions. Plantations of fast growing species like Eucalyptus, Subabool and oil seed bearing trees like Jatropha have been completed in 10 hectares of land around the village to ensure sustained supply of wood for the gasifiers. An expeller unit will also be installed to produce bio-oil from the oilseeds of the Jatropha plantation, which will be used for running pumpsets. Improved chulhas have been constructed in every house to conserve firewood and biogas plants have been built to provide cooking energy to the households.

SOLAR THERMAL ENERGY PROGRAMME

Solar thermal devices are being utilised for water heating, space heating, cooking, drying and can be utilised for space heating, water desalination, industrial process heat, steam generation for industrial and power generation applications, operation of refrigeration systems, etc.

Low-grade solar thermal devices (for temperature range 100-300 degree C) like solar water heaters, air heaters, solar-cookers, solar dryers, etc., have been developed and deployed in the country. Solar water heaters of capacity ranging from 50 litre per day to 2,10,000 litre per day for domestic, commercial and industrial applications have been installed in the country. Over 10,00,000 sq. meters of collector area has so far been installed ranging from domestic water heaters of 50-200 litre

capacity in homes and up to 2,40,000 litre of hot water per day in industrial and commercial sectors. The manufacturing base of solar water heaters is now well established in the country with 83 manufacturers employing BIS standards.

Around 5.99 lakh solar cookers were also deployed. Solar concentrating collectors were installed for generating steam and the world's largest solar steam cooking system for cooking food for 15,000 people per day was installed at Tirumala, in Andhra Pradesh. Dish Solar Cookers were also promoted in the villages, which are electrified or to be electrified with conventional grid for faster outdoor cooking for about 10 people. Efforts are also on to make use of solar passive architecture principles to reduce energy consumption and improve comfort conditions in buildings. Solar air heating systems have also been deployed for drying of agricultural and industrial products which has helped in saving a substantial amount of conventional fuels.

SOLAR PHOTOVOLTAIC PROGRAMME

Solar photovoltaic (SPV) systems have emerged as the most useful power source in remote and energy starved areas for meeting the needs such as lighting, water pumping, telecommunications, powering primary health centres and other community requirements. More than 50 industries are involved in the manufacturing of SPV systems and above 17 industries are involved in the production of PV modules. During the 2005-06, solar photovoltaic modules of about 65 MWp have been produced; out of which 55 MWp have been exported. So far more than 1.3 million SPV systems are powering a variety of applications in the country. The cumulative capacity of these SPV systems is about 68.02 MWp. A cumulative total of about 85 MWp SPV modules have so far been exported to various countries.

Under the solar photovoltaic demonstration and utilisation programme about 5.6 lakh solar lanterns, 3.42 lakh solar home systems, 54,000 solar street lighting systems, 7,002 solar water pumping systems, standalone power plants cumulating to a capacity of 1851 KWp and grid interactive power plants cumulative to a 2.9 MWp have been installed in the country till March 2006. In addition to the above, 2483 remote villages and 594 hamlets have also been electrified using different solar photovoltaic systems.

GRID-INTERACTIVE RENEWABLE POWER

A total grid interactive power-generating capacity of 8,095 MW has been added by 31 March 2006 from renewables, mainly wind, small hydro, biomass and solar energy. Most of this capacity has come through commercial projects.

Wind Power : While the gross wind power potential is estimated at around 45,000 MW, the potential that can be tapped at present is limited to about 14,775 MW. This is because the feasible potential is governed by grid capacity. A capacity of 5,340 MW up to 31 March 2006 has so far been added through wind, which places India in the fifth position globally after Germany, Spain and USA.

Biomass Power : The Biomass Power Programme especially through Cogeneration Projects aims at utilisation of a variety of biomass materials, agro industrial residues, energy plantations besides agro residues for power generation through the adoption of conversion technologies like combustion, pyrolysis, gasification, etc. The plants utilise gas / steam turbines, dual-fuel / gas engines or combinations thereof, either for generation of power alone or cogeneration of power, for either captive use or sale to the grid.

Capacity addition of around 160 MW was brought about in the country during 2005-06 through the technologies of biomass power and bagasse cogeneration in sugar mills. The country now has more than 700 MW of capacity based on these two technologies. In bagasse cogeneration, more than 63 sugar mills are now generating a surplus electricity of 526 MW for feeding into the grids. Such a large number of grid interactive cogeneration projects has not perhaps been installed anywhere else in the world. The technology and the equipment for these projects have been sourced indigenously. The 67 biomass power projects aggregating to 386 MW capacity have also been beneficial to the country through creation of a large number of employment and income generation opportunities – specially in rural areas.

The potential of Biomass power in the country has been estimated at about 19,500 MW, including surplus power generation potential of around 3,500 MW from bagasse-based cogeneration from existing sugar mills in the country. So far, a total capacity of 912 MW biomass based power-generating systems has been installed in the country. Projects of a capacity of 1180 MW are under installation.

Biomass Gasifier Programme : A capacity addition of around 9 MW of equivalent electric power was achieved during 2004-05 through around 25 projects in 8 States. This includes systems based on the newly developed technology of 100 per cent producer gas engine based power generation as well as well as those based on more established dual fuel engine systems. India has achieved a leadership position in the biomass gasification technology and systems are being exported to many countries. Systems of up to 1 MW capacity are now being installed in the country using the latest versions of biomass gasification technology. Biomass gasifiers aggregating to 66 MW capacity have been installed in the country till March 2006.

Small Hydro Power : The potential for Small Hydro Power (SHP) has been assessed at around 15,000 MW. By 31 March 2006, a total of 1826 MW capacity had been set up. In addition, projects aggregating to 468 MW capacity are under various stages of implementation.

RENEWABLE ENERGY FOR URBAN, INDUSTRIAL AND COMMERCIAL APPLICATIONS

In an effort to mitigate the energy problems of cities and towns and to provide alternative energy solutions for industrial and commercial establishments, various systems / devices working on solar energy, energy recovery from urban and industrial waster, biomass energy and co-generation (non-bagasse) in industry, etc., are being promoted by the Ministry. A new Group on Urban, Industrial and Commercial Applications was set up in the Ministry in February 2005 to provide renewed thrust to these sectors.

Solar Energy : An accelerated programme for development and deployment of solar water heating systems aimed at installation of one million sq.m. of collector area during 2005-06 and 2006-07 is being implemented by the Ministry. Around 1.5 million sq.ms of collector area has been installed so far in the country, which includes 4.0 lakh sq.m. installed during 2005-06. Interest subsidy is now provided by the Ministry so that loans are available from banks / Fls at effective interest ranging from 2 per cent to 5 per cent. The network of participating banks / Fls has also been expanded. Supportive measures e.g. amendment in building bye-laws for making the use of systems mandatory, providing rebates in electricity tariff and property tax to the users, persuading builders and developers to construct buildings and

housing complexes integrated with solar water heaters etc are being taken to accelerate the deployment.

Solar Air Heating / Steam Generating Systems are being promoted in industries and institutions for the purpose of drying, cooking and process heat applications. About 10,000 sq.m. of collector area for solar drying and 12 solar steam generating systems of different capacities for various applications have been installed so far. Solar buildings based on solar passive architecture design are being promoted with a view to provide comfortable living and working conditions, both in winter and in summer, while conserving conventional electricity.

Energy Recovery from Urban Wastes : The Ministry is implementing an Accelerated Programme for promotion of projects for Energy Recovery from Urban Wastes. The Programme provides for attractive incentives in the form of capital subsidy for making urban waste-to-energy projects financially viable and remunerative. The programme includes promotion of projects for power generation from MSW through a two-stage process involving production of RDF by processing of MSW and combustion of RDF for generation of power in a fast track mode.

Capital subsidy is available for fast track projects based on combustion of RDF upto maximum of Rs. 1.5 crore per MW, whereas Rs. 2 crore per MW is available for projects based on bio-methanation. With a view to promote the adoption of state-of-the-art technologies, higher financial assistance @ Rs. 3 crore per MW is available for setting up of demonstration projects based on technologies such as pyrolysis, gasification, plasma arc, etc.

Three projects for energy recovery from Municipal Solid Wastes with an aggregate capacity of 17.6 MW have been set up at Hyderabad, Vijayawada and Lucknow. Other urban waste projects include a 1 MW project based on cattle manure at Haebowal, Ludhiana; a 0.5 MW project for generation of power from biogas at a sewage treatment plant at Surat; and, a 150 kW plant for vegetable market and slaughterhouse wastes at Vijayawada. Another 250 kW project based on vegetable market waste has been commissioned at Chennai.

Energy Recovery / Power Generation from Industrial and Commercial Wastes and Effluents : The programme for the recovery of energy / power generation from industrial and commercial wastes and effluents aims at promoting technology for processing / treatment of industrial wastes and effluents for the recovery of energy / power generation, with additional benefits of waste reduction and abatement of environmental pollution. Capital subsidy ranging from Rs. 50 lakh to Rs. one crore per MW is available depending upon the technology configuration and type of waste and other terms and conditions.

A project for the generation of 1.5 MW power from industrial waste was commissioned during 2005-06 and six projects of an aggregating capacity of 21.75 MW were under construction. Thus, industrial waste-to-energy projects for generation of biogas / power with an aggregate capacity of 26.25 MW have been commissioned upto March 2006

Biomass Energy and Co-generation (Non-Bagasse) in Industry : The programme on Biomass Energy and Co-generation (non-bagasse) in Industry was developed and notified during the year 2005-06. The programme aims at utilisation of biomass (non-bagasse) for the generation of heat energy / power, to be used for captive requirement of industries for making them self-dependent for their energy needs. Capital subsidy ranging from Rs. 20 lakh to Rs. 1.5 crore per MW is available

depending upon the type of project, and other terms and conditions. During the year 2005-06, two biomass co-generation (non-bagasse) power projects of aggregating capacity of 7.5 MW and 25 gasifier systems of aggregating capacity of 6.5 MW were installed in various industries to meet their beat / power requirements.

NEW TECHNOLOGIES

Hydrogen Energy : A programme covering research and development pertaining to production of hydrogen, its storage, safety, applications, etc., has been undertaken in the country with a view to create an alternate source of energy. A National Hydrogen Energy Board has been set up to guide and oversee the preparation of a Hydrogen Energy Road Map and its implementation through a National Programme on Hydrogen Energy. The National Hydrogen Energy Board, set up a Steering Group for preparation of the National Hydrogen Energy Road Map. The Road Map prepared by the Steering Group was approved by the National Hydrogen Energy Board in its meeting held in January 2006. The Road Map envisages taking up of Research, Development and Demonstration activities in various sectors of hydrogen energy technologies. It has visualised goals of one million hydrogen-fuelled vehicles and 1,000 MW aggregate hydrogen based power generation capacity to be set up in the country by 2020. Applications of hydrogen directly in internal combustion engines for transport application as well as decentralised power generation and also in fuel cells for stationary, mobile and transport applications have been demonstrated. Hydrogen-powered two wheelers, three wheelers, catalytic combustors, and power generating sets have been developed and demonstrated in the country. A pilot project for field-testing of 10 hydrogen-fueled motorcycles is under progress. A pre-commercial pilot plant for production of hydrogen from distillery waste has been set up. Projects on setting-up of a hydrogen dispensing station and hydrogen CNG blending for use in automobiles have been planned.

Fuel Cells : Research and Development Projects for development of different types of fuel cells like Proton Exchange Membrane Fuel Cells (PEMFC), Phosphoric Acid Fuel Cells (PAFC), Solid Oxide Fuel Cells (SOFC), Direct Methanol Fuel Cell (DMFC), Direct Ethanol Fuel Cells (DEFC) and Molten Carbonate Fuel Cells (MCFC) alongwith components and materials for fuel cells including control and instrumentation system are being supported. PAFC fuel cell stacks up to 25 kW have been developed and demonstrated by BHEL for power generation. SPIC Science foundation has developed PEMFC stacks up to 5 kW capacity for vehicular application and decentralised power generation. A fuel cell–battery hybrid van has also been developed and demonstrated by SPIC Science Foundation. A 3kW capacity PEMFC power pack, developed by SPIC Science foundation, to work as an uninterrupted power supply is currently undergoing modification for improving its performance. The Indian Institute of Chemical Technology, Hyderabad is working on the development of a 50 kW fuel cell system, using methanol which will be reformed into hydrogen.

Geothermal Energy : Assessment of Geothermal energy potential of selected sites in J and K, Himachal Pradesh, Uttaranchal and Jharkhand and Chhattisgarh has been / is being undertaken. Some more field investigations including deep drilling at potential geothermal sites would be required before these sites can be taken up for development for power generation.

Ocean Energy : The various forms of ocean energy are waves, ocean energy thermal conversion, currents and tides. Of these, tidal energy has the potential for being harnessed for power generation, in the medium term. A feasibility report for setting

up a tidal power project at Durgaduani Creek in Sunderbans area of West Bengal has been prepared. An environmental compact assessment study has also been completed for the project. The project could be considered after all the statutory clearances have been obtained by the implementing agencies.

Bio Fuels : Several R&D projects have been taken up in the country to develop technologies to convert different non-edible vegetable oils to bio-diesel. The performance of stationary diesel engines using different neat non-edible oils for generation of power on decentralised basis is being studied under Bio-fuel pilot-demonstration project. Field trials with ethanol blends in petrol and diesel have also been taken up in the country under several projects financed by the Ministry.

Battery Operated Vehicles : R&D projects on development of high energy density batteries such as nickel-metal-hydride, lithium-ion and lithium polymer electrolyte batteries and super capacitors for BOVs are being supported. Prototypes of nickel-metal-hydride batteries developed have been demonstrated for operating an electric auto-wheeler.

SPECIALISED TECHNICAL INSTITUTIONS

The Ministry has established the following institutions for R&D and related applications:

Solar Energy Centre : The Solar Energy Centre, which was set-up in 1982, is an integral part of the Ministry of Non-Conventional Energy Sources for development and promotion of solar energy technologies. The main objectives of the Centre are : (i) (a) To act as a national test and standardisation centre for solar energy materials, components and systems, (b) To pursue collaborative R&D with industry and academics, (c) To evaluate new technologies, (d) To provide advisory and consultancy services, (e) To work on human resource development and dissemination of information. (ii) The R&D campus of the Centre is located on the Gurgaon-Faridabad Road at the outskirts of Delhi. The campus houses the national test facility for solar thermal and solar photovoltaic systems and components, laboratories for system design and engineering, demonstration units on solar electric generating systems for their long-term performance evaluation, seminar hall and auditorium for training and workshops, a library for reference on renewable energy topics and a small guest house for visitors. Essentially, it functions as an effective interface of the Government, institutions, industry and user organisations. (iii) Right from its inception, the Centre has been playing a crucial role in promotion of solar energy technologies in the country. The Centre has been working closely with the solar energy group of the Ministry to provide technical back-up and carry out various activities including R&D, testing and demonstration, training and information dissemination. The Centre contributed significantly in bringing out several National Standards on solar technologies. (iv) The current activities of the Centre include up-gradation of the solar photovoltaic test facility for obtaining international accreditation, development and refinement of test procedures for various solar thermal and solar photovoltaic devices and systems, setting-up laboratories for incorporating solid state lighting in photovoltaic systems. A project for preparation of the updated version of solar radiation data for the country has jointly been taken up with India Meteorological Department. Work on establishment of an "Automatic Weather Station" in the campus of the Centre has been initiated. A handbook on energy conscious architecture, prepared jointly with IIT Bombay, has recently been finalised. The handbook will include information on basic principles, design

guidelines, building materials, evaluation tools and the fundamental concepts pertaining to building science. A collaborative project with National Botanical Research Institute, Lucknow on energy plantation for production of biomass for bio-fuels has been continuing for establishing the protocols of such plantation. 26,000 saplings of Jatropha curcas have been planted in the SEC campus.

Centre for Wind Energy Technology : A Centre for Wind Energy Technology (C-WET) has been set up at Chennai, Tamil Nadu, its wind turbines test station located at Kayathar in district Thoothukudi, Tamil Nadu. C-WET's mission is to make domestically-owned wind industry internationally competitive through demonstration and commercialisation of products and services at par with international standards, specifications and performance parameters, C-WET comprises five units, namely, Research and Development, Wind Resources Assessment, Wind Turbine Testing, Standards and Certification, and information, Training and Commercial Services. These units offer integrated solutions in keeping with its mission to facilitate development, demonstration and commercialistic of megawatt scale wind electric generators for on-shore and off-shore applications, to carry out Wind mapping for the country in order to determine areas and sites most suitable for Wind Electric Generators (WEGs) deployment; to ensure manufacturing and deploying of WEG by conducting their type approval tests at par with international standards, specifications and performance parameters, and to serve as the technical focal point for wind power development in India, for promotion and accelerating the pace of utilization of wind energy and support the growing wind power sector in the country.

During the year 2005-06 four R&D projects were in progress at C-WET. 22 wind monitoring stations using 25 metre masts were set-up in the North Eastern States and data collection from another 47 wind monitoring stations already set-up was in progress. Seventh volume of wind resource survey in India was published and two type approval tests on wind turbines were completed.

Sardar Swaran Singh National Institute of Renewable Energy (SSS-NIRE) : To conduct R&D in renewable energy.

PUBLICITY AND AWARENESS CREATION

Initiatives have been taken to create greater awareness on new and renewable energy in order to facilitate greater acceptability both in rural and urban areas and industrial and commercial sectors.

Rajiv Gandhi Akhshay Urja Diwas : An effective and far reaching mass awareness campaign about Renewable Energy is being organised to commemorate the birth anniversary of former Prime Minister, late Shri Rajiv Gandhi as "Rajiv Gandhi Akshay Urja Diwas" on 20 August every year since 2004 all over the country. Public Awareness Programmes are organised on a mass scale on this day at the National, State, District and Block / Taluka levels through mass rallies, formation of human chains, organisation of essay, quiz, slogan-writing and painting competitions, and debates, seminars and group discussions, etc., among others. More than 50 lakh children participate in these activities throughout the country. These activities have helped create the much needed awareness on the use of renewable energy systems / devices in daily life.

District Advisory Committees : District Advisory Committees (DACs) have been set-up in every district with the Collector / Deputy Commissioner as its Chairman in order to create awareness on renewable energy at the district level. 540 DACs

have been set-up so far in the country, which have given a much-needed fillip to the development of renewable energy. Among others, district officials, representatives of Members of Parliament, Doctors, Engineers, Lawyers, representatives of NGOs, Rotary / Lion Clubs are DAC members of which 6 are women. These DACs are required to convene at least once every quarter. These committees which have led to the creation of an effective renewable energy promotion network at the grass root level will also help integrate renewable energy schemes with those of other developmental departments.

Renewable Energy Clubs : Renewable Energy Clubs (RECs) are being set-up in AICTE recognized Engineering Colleges / Technology Institutions all over the country. These clubs which are funded with a grant of Rs. 25,000 per annum are to educate and sensitise future scientists about the potential and prospects of renewable energy. Besides inculcating a scientific temper among young scientists, the RECs would also help in exposing them to the career opportunities in this sector.

Media Workshops : Media Workshops for persons both from the print and electronic media are being organized in different parts of the country in order to inform and brief them about new and renewable sources of energy, its various systems / devices as well as technologies. These workshops evoked a highly encouraging response and helped in creating awareness among media persons, who in turn focused their attention on this sector.

Renewable Energy Compendium and Akshay Urja Newsletter : A Compendium on Renewable Energy containing up-to-date information on renewable energy in the country has been released. Profiles of about 150 Renewable Energy industries in solar, wind, small hydro, biomass gasification, co-generation and waste to energy sectors, etc., are included in the compendium.

A bi-monthly newsletter titled "Akshay Urja" has been started. It contains useful information and developments in the renewable energy sector not only in country but also abroad.

SPECIAL AREA DEMONSTRATION PROGRAMME

The Special Area Demonstration Programme (SADP) aims at demonstrating renewable / non-conventional energy systems and devices in all parts of the country, with a view to create awareness and give publicity amongst students, teachers and the public. 24 State level and 435 district level Energy Parks have been set up till 31 March 2006.

AKSHAY URJA SHOPS

With a view to increase the outreach of renewable systems / devices, akshay Urja Shops are being set-up to cover every district in the country to ensure easy availability of such systems / devices apart from catering to repair and maintenance needs. With the setting-up of these shops and other related initiatives, it is expected that the public will embrace renewable energy technologies in a big way for augmenting energy needs of cooking, lighting and motive power. Solar photovoltaic systems / devices e.g. streetlight control systems, street / public garden lights, illuminated hoardings, road studs, blinkers, traffic signals, BIPV systems and power packs are made available at these shops. Besides promoting the renewable devices, they also help in creating awareness about the benefits of using these devices and reducing the burden on conventional electricity in cities / towns. So far 104 Akshay Urja Shops have been opened.

12 Environment

INTRODUCTION / ROLE OF THE MINISTRY

Implementation of policies and programmes relating to conservation of the country's natural resources including lakes and rivers, its biodiversity, forests and wildlife, ensuring the welfare of its animals and prevention and abatement of pollution are primary concerns of the Ministry of Environment and Forests under the Government structure. While implementing these policies and programmes, the Ministry is guided by the principle of sustainable development and enhancement of human well-being. The Ministry also serves as the nodal agency in the country for the United Nations Environment Programme (UNEP), South Asia Co-operative Environment Programme (SACEP), International Centre for Integrated Mountain Development (ICIMOD) and for the follow-up of the United Nation's Conference on Environment and Development (UNCED). The Ministry is also responsible for dealing with issues relating to multilateral bodies such as the Commission on Sustainable Development (CSD), Global Environment Facility (GEF) and of regional bodies like Economic and Social Council for Asia and Pacific (ESCAP) and South Asian Association for Regional Cooperation (SAARC) on matters pertaining to environment.

The broad objectives of the Ministry are conservation and survey of flora, fauna, forests and wildlife, prevention and control of pollution, growth in forest cover by afforestation and regeneration of degraded areas, protection of environment and ensuring the welfare of animals. These objectives are well supported by a set of legislative and regulatory measures, aimed at preservation, conservation and protection of the environment. Besides the legislative measures, a National Conservation Strategy and Policy Statement of Environment & Development, 1992, National Forest Policy, 1988, a Policy Statement on Abatement of Pollution 1992 and a National Environment Policy 2006 have also been evolved for guiding actions in future.

SURVEY AND EXPLORATION OF NATURAL RESOURCES

FLORA

Exploration of plant resources of the country and identification of plant species with economic virtues is carried out by the Botanical Survey of India (BSI), established on 13th Feb, 1890 with the help of its ten circle offices located in different parts of the country. As a part of scientific development of the country, it was reorganized and during the successive plan periods, the functional base of Botanical Survey of India was expanded to include various new areas such as inventorising of endemic, rare and threatened plant species; evolving conservation strategies; and conducting studies on fragile ecosystems and protected areas like Sanctuaries, National Parks and Biosphere Reserves; monitoring of changes in floristic components; conservation; multiplication and maintenance of germplasms of plant genetic resources, endemic and threatened species, wild ornamental plants etc., in botanic gardens, ethnobotanical and geobotanical studies and development of a national database on herbarium (including type specimens) and live collections, plant genetic resources, plant distribution and nomenclature. The BSI undertakes exploration, inventorisation and documentation of phytodiversity in general and protected areas, hotspots, fragile

ecosystems and sacred groves in particular and publication of National, State and District Flora to evaluate the qualitative changes in species in rich and sensitive areas; ex-situ conservation of critically threatened taxa in botanical gardens and identification of species with traditional economic uses and preparation of protocols for their conservation and sustainable utilization

- Forty eight field survey / explorations / live plant collections / EIA tours were undertaken by different circle offices and units of BSI covering various parts of the country extensively, including national parks and sanctuaries. During the field survey / exploration / collection tours, more than 5,000 specimens were collected including lower groups of plants. About 3,000 specimens belonging to geo species were identified by different circles and units of the Botanical Survey of India. Seven herbarium consultation tours / study tours were also undertaken in connection with the revisionary and floristic studies under National / State / Regional / District flora. Twenty three new species / varieties were discovered and 25 new records for India and 41 new records for states were created and nine plants were collected after 50 years or more by the BSI.

FAUNA

The Zoological Survey of India (ZSI), a premier institute under the Ministry has been undertaking survey, exploration and research leading to the advancement of our knowledge on the exceptionally rich faunal diversity of the country since its inception in 1916. ZSI with its headquarters at Kolkatta and 16 Regional Stations located in different parts of the country, in recent years, has reoriented its plan of work by grouping the survey and studies under five major programmes.

One hundred and one extensive faunal surveys were undertaken in different states / UTs including important ecosystems and some selected conservation / protected areas by ZSI and its regional stations. Four status surveys, one for the Tibetan Wild Ass (Kiang) in Ladakh, second for Himalayan Marmot in Ladakh, Third for Snow Trout in Himachal Pradesh and the fourth for Himalayan Salamander in West Bengal were carried out. Several short duration intensive surveys for ecological studies were also undertaken. The National Zoological Collections were further enriched by the addition of 9532 identified species belonging to 487 species.

FORESTS

The Forest Survey of India (FSI), set up on June,1, 1981 an attached office of the Ministry, is engaged in generating information and database on area under forest cover, tree cover and water resources of the country besides providing services of training, research and extension. The headquarters of FSI is located at Dehradun and its four zonal offices are situated at Shimla, Kolkata, Nagpur and Bangalore.

FSI assesses forest cover of the country every two years by digital interpretation of remote sensing satellite data and publishes the results in a biennial report called "State of Forest Report" (SFR). Beginning in 1987, nine SFRs have been brought out so far and the 10^{th} SFR is under publication. In the current 10^{th} cycle (i.e. for SFR 2005) FSI has used satellite data for IRS P6 Resource sat LISS III having 23.5 under resolution.

In respect of forest inventory, data collection and data processing work of Trees outside Forests (TOF) Rural and Urban for 60 districts pertaining to the period 2004-06 has been completed. Data collection work in respect of additional thirty districts pertaining to 2006-07 is being done. The inventory provides information on growing

stock of wood, diameter and species distribution of trees, regeneration status of forests and biodiversity to some extent and the soil carbon.

FSI has further taken up the inventory of TOF in the current year of selected five districts of Uttarakhand. The inventory, data processing and final report is about to be completed which will provide the information on available timber resources outside the forests in the state. This would mainly help the state government to decide issuing of license to the wood based industries to run them. The FSI has taken initiative for the detection and reporting of forest fires at National level on near real time basis using satellite data. Information so far obtained and projected on to the forest cover of India has been disseminated to the concerned State Forest Departments for taking prompt action in controlling the forest fires. A study on forest cover in twenty eight Tiger Reserves of India has revealed that there was an increase in forest cover in five Tiger Reserves, a decrease in eleven and no change in twelve Reserves with overall slight decrease in forest cover. As per the study, the major loss in forest cover occurred in Nomeri, Buxa, Manas, Indravati and Dampa Tiger Reserves due to socio-economic reasons and natural disasters.

The Ministry constituted an Expert / Advisory Working Group with the aim to support the implementation of an integrated National Forestry Database Management Information System (NFDMS) in a comprehensive manner including strengthening of technological, institutional and human capabilities to ensure continuing and effective dissemination and use of forest statistics. The Ministry also constituted a National Working Group / Governing Body to frame the policy guidelines on 'Forest Certification' for Timber and Non-Timber Forest Products (NTFPs). The National Working Group / Governing body also finalized the Terms of Reference (TOR) for the Committees e.g. Committee for "Certification Criteria", Committee for "Certification Processes" and Committee for 'Accreditation Criteria and Process".

A Core Group was also constituted by the Ministry consisting of experts and representatives from the Stakeholders to study the report on 'Domestic Sensitivity of Imports given by Research Information System (RIS) for the Non-Aligned and other Developing countries. The Core Group accepted the recommendations of the report of the RIS which was mainly related to the bound-rates essential for the Ministry of Commerce and Industry for WTO negotiations after a series of meetings. The Core Group has also recommended the forestry items to be included in the Sensitive (Negative) List and for rationalizing the duty structure for forestry items.

A Sustainable Forest Management Cell has been created in the Survey and Utilization Division in the Ministry with specific Terms of Reference (TOR), in persuasance to the recommendations of the National Task Force on Sustainable Forest Management (SFM) and the recommendations made at the National Workshop on criteria and indicators organized at IIFM, Bhopal. A National 'Multi-Disciplinary Team' has been constituted to combat the smuggling of Red-Sanders under the Chairmanship of Director General of Revenue Intelligence. Various important decisions were taken in the first meeting of the team held on July 18, 2006 to control the smuggling of Red Sanders especially in the customs areas.

India is a producer-member of the International Tropical Timber Organisation (ITTO) which was established by the International Tropical Timber Agreement (ITTA), 1983. At present there are 59 Member countries in ITTO, out of which 33 are Producer-Member countries and 26 are Consumer-Member countries. India actively participated in the four rounds of negotiations and significantly contributed towards

the finalization and adoption of new agreement, International Tropical Timber Agreement (ITTA), 2006. The ratification of the new agreement by the Member countries is in progress before its entry into force. During the year, India actively participated in the successive International Tropical Timber Council (ITTC) sessions.

CONSERVATION

BIOSPHERE RESERVES

Biosphere Reserves are areas of terrestrial and coastal ecosystems which are internationally recognized within the framework of UNESCO's Man and Biosphere (MAB) Programme. These reserves are required to meet a minimal set of conditions before being admitted to the World Network of Biosphere Reserve designated by UNESCO for inclusion in the World Network of Biosphere Reserves. The world's major ecosystem types and landscapes are represented in this Network. The goal is to facilitate conservation of representative landscapes and their immense biological diversity and cultural heritage, foster economic and human development which is culturally and ecologically sustainable and to provide support for research, monitoring, education and information exchange. The scheme is a pioneering effort at pursuing the increasingly difficult yet urgent task of conserving ecological diversity under mounting pressure. So far, fourteen Biosphere Reserves have been set up. There are: Nilgiri, Nanda Devi, Nokrek, Great Nicobar, Gulf of Mannar, Manas, Sunderbans, Similipal, Dibru Daikhowa, Dehong Deband, Panchmarhi, Kanchanjanga, Agasthyamalai, and Achanakmar-Amarkantak. Out of these fourteen Biosphere Reserves, four have been recognized on World Network of Biosphere Reserves by UNESCO, namely, Nilgiri, Sunderbans, Gulf of Mannar and Nanda Devi Biosphere of Uttarakhand.

Efforts are being made for getting the remaining Biosphere Reserves included in the World Network of Biosphere Reserves. While the Core areas of Biosphere Reserves will continue to be protected under the Wildlife (Protection) Act, 1972, Indian Forest Act, 1927 and Forest Conservation Act, 1980, a separate Regulation with in the framework of existing Environment (Protection) Act, 1986 is being firmed up to regulate activities within Buffer Zone of the Biosphere Reserves.

WETLANDS

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the water surface and land is covered by shallow water. They are life support systems for people living around and are effective in flood control, waste water treatment, reducing sediment, recharging of aquifers and also winter resort for a variety of birds for shelter and breeding and provide a suitable habitat for fish and other flora and fauna. They also act as a buffer against the devastating effects of hurricanes and cyclones, and help to stabilize the shore-line and act as bulwark against the encroachment by the sea and check soil erosion. Apart from that, they are valuable for their use in educational and scientific purposes and provide durable timber, fuel wood, protein rich fodder for cattle, edible fruits, vegetables and traditional medicines.

Identification of wetlands can be attributed to the following three main factors, viz., (i) When an area is permanently or periodically inundated; (ii) When an area supports hydrophytic vegetation; (iii) When an area has hydric soils that are saturated or flooded for a sufficiently long period to become anaerobic in the upper layers.

Based on these criteria, the Ramsar Convention defines Wetlands, as areas of marsh or fen, peat-land or water, whether artificial or natural, permanent or temporary, with the water that is static or flowing, a fresh brackish or salt including areas of marine water, the depth of which at low tide does not exceed six meters. Mangroves, corals, estuaries, bays, creeks, flood plains, sea grasses, lakes, etc., are covered under this definition.

The National Wetland Conservation Programme for conservation and management of wetlands has been undertaken to lay down policy guidelines for implementing programmes of conservation and management of wetlands in the country, to undertake priority wetlands for intensive conservation measures, to monitor implementation of the Programme of conservation, management and research and to prepare an inventory of Indian Wetlands. During the year 2006, 94 wetlands were identified in 24 states.

MANGROVES

Mangrove plants are those that survive high salinity, tidal extremes, strong wind velocity, high temperature and muddy anaerobic soil—a combination of conditions hostile for other plants. Mangroves are successfully adopted in colonizing saline inter-tidal zone at the interface between the land and sea along the deltas, shallow lagoons, mud flats, bays and backwaters in tropical and subtropical sheltered coast lines. Mangroves not only protect the coastal communities from the fury of cyclones and coastal storms, but also promote sustainable fisheries and prevent sea erosion. Of late, the fragile mangrove ecosystems have been subjected to various anthropogenic and biotic pressures resulting in habitat destruction, loss of bio-diversity, affecting avifauna (birds) and their migration paths. The Ministry launched Mangrove Conservation Programme in 1987 and, has so far, identified 38 mangrove areas for intensive conservation and management.

The Ministry accords high priority to the conservation and management of mangroves and coral reefs in the country. The coastal Regulation Zone Notification (1991) under the Environmental Protection Act (1986) recognizes the mangrove and coral reef areas as ecologically sensitive and categorize them as CRZ – (i) implying that these areas are afforded protection of the highest order. The National Environment Policy, 2006 recognizes the mangroves and coral reefs as important coastal environmental resources.

Mangroves in India account for about five percent of the World’s mangrove vegetation and are spread over on area of about 4500 square kilometers along the coastal states / UTs of the country. Sunderbans in West Bengal account for a little less than half of the total area under mangrove in India. The Forest Survey of India is assessing the vegetation cover of the country including mangroves cover followed by Gujarat and Andaman & Nicobar Islands. India is home to some of the best mangroves in the world. The Ministry has established a National Mangrove Genetic Resource in Orissa.

Platform reefs are seen along the Gulf of Kutch and atoll reefs are found in the Lakshadweep Archipelago.

The National Committee on Mangroves & Coral Reefs had earlier recommended intensive conservation & management of coral Reefs in four areas namely, Andaman & Nicobar Islands, Lakshadweep Islands, Gulf of Kutch and Gulf of Mannar.

The Ministry provides financial assistance to the State Forest Departments of all the four identified coral reef areas in the country for activities like monitoring, surveillance, education and awareness. Besides, the Ministry also supports R&D activities with emphasis on targeted research on coral biodiversity, its management including various aspects of pollution in these areas.

The Indian reef area is estimated to be 2,375 sq.km. For encouraging targeted research on both hard and soft corals in the country the Ministry has established a National Coral Reef Research Centre at Port Blair in the Andaman & Nicobar Islands.

BIODIVERSITY

A scheme on Biodiversity conservation was initiated earlier to ensure coordination among various agencies dealing with the issues related to conservation of biodiversity and to review, monitor and evolve adequate policy instruments for the same. The progress / achievement of this scheme are as follows.

The convention on Biological Diversity (CBD) is the first comprehensive global agreement which addresses all aspects relating to biodiversity. The CBD which has near universal membership with 189 countries as its partners, sets out commitments for maintaining the world's ecological underpinnings, while pursuing economic development. India is a Party to the CBD. The Third National Report of CBD was finalized, printed and formally released on November,2006 by Hon'ble Minister (E&F) during the inaugural session of the International Conference on Biosafety. In 2006, the eighth meeting of Conference of Parties (CoP) was held in Curitiba, Brazil, in which an Indian delegation with representatives from the Ministry of Environment and Forests, Ministry of Commerce and Ministry of Agriculture participated actively.

Subsequent to the approval of the National Environment Policy (NEP) by the Cabinet in 2006, a draft National Biodiversity Action Plan (NBAP) in consonance with the NEP and using the final technical report on UNDP / GEF project on National Biodiversity Strategy and Action Plan (NBSAP) as one of the inputs is being prepared. India was invited to chair the Group of Like Minded Megadiverse Countries (LMMCs) for a period of two years from March,2004 to March,2006. India steered the development of a common position of LMMCs for the negotiations for developing an international regime on access and benefit sharing.

A National Biodiversity Authority set up at Chennai on Ist October,2003 as per the provision of the Biological Diversity Act, 2002, is mandated to facilitate implementation of the Act. In compliance with the provisions of the Act, eighteen states have formed State Biodiversity Boards and other states are in process of establishing State Boards.

Ministry of Environment & Forests is the nodal Ministry for Implementing the Cartagena Protocol on Biosafety, the first international regulatory framework for safe transfer, handling and use of Living Modified Organisms (LMOs).

The Indian delegation actively participated in the third meeting of COP-MOP-3 held at Brazil. The meeting adopted important decision regarding implementation of Article 18 2a which requires clear and detailed identification requirements for shipments of Living Modified Organisms that are inlended for direct use as food or feed, or for processing (LMO-FFPs). A workshop for custom officials was organized on the biosafety issues related to trans-boundary movement of LMOs. The objective of the workshop was to inform custom officials about laws, regulation, practice of domestic and foreign bio-safety management, introducing the procedures for the application and approval of LMOs etc. The India Biosafety clearing House (IND-

BCH) has been established and made operational in order to facilitate the exchange of scientific, technical, environmental and legal information of LMOs as per article 20 of the Cartagenal Protocol on Biosafety. Besides this, Four laboratories are been strengthened for detection of LMOs.

The Genetic Engineering Approval Committee (GEAC), the apex body was notified under Rules for the manufacture, use, import, export and storage of Hazardous Microorganisms / Genetical, Environmental Organisms or Cells Rules 1989 for regulation of genetically modified organisms in India. The GEAC has approved 42 Bt cotton hybrids for commercial release in the nine cotton growing states viz. Andhra Pradesh Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan and Tamil Nadu during Kharif 2006. Besides this, under this scheme six Gazette Notifications (G.S.R. 584 (E) to 589 (E) dated September 21, 2006) empowering the Seed Inspectors / Analysts and Laboratories notified under Seed Act, also under EPA, 1986 have been issued to curb the sale and production of illegal Bt cotton seeds. With the promulgation of the said notifications, the seed law enforcement agencies are empowered to take necessary positive action against the offenders. An Inter-Ministerial Task Force on Recombinant Pharma under Dr. R.A. Mashelkar was set up with a view to streamline the regulatory mechanism for r-pharma products. The recommendations of the Task Force have been adopted through the inter-ministerial consultation and have come into force on April 1, 2006. A Gazette Notification (G.S.R.616(E)) exempting certain categories of products from the purview of GEAC has been issued on October 4, 2006.

The Ministry is currently implementing a CEE-World Bank Capacity Building project on Biosafety aiming at strengthening the institutional capability as well as at enhancing the human resources capacities in the field of Biosafety to assist India to fully implement the obligations under the Cartagena Protocol on Biosafety related to the trans-boundary movement of LMOs.

FOREST CONSERVATION

Forests are a renewable source and contribute substantially to economic development. They play a major role in enhancing the quality of environment. The forest cover in the country is 6,78,333 sq km and constitutes 20.64 per cent of its geographical area. Of this, very dense forest constitutes 51,285 sq km (1.56 per cent) moderately dense forest constitutes 3,39,279 sq km (10.32 per cent) and open forest 2,87,669 sq km (8.76 per cent). A comparison of forest cover assessment of 2003 with that of 2001 reveals that there is an overall increase of 2,795 sq km.

According to State of Forest Report, 2003, the mangrove cover in the country occupies 4,461 sq km (0.14 per cent) of the geographic area of which the very dense mangroves comprises 1,162 sq km (26.05 per cent of mangrove cover), moderately dense mangrove is 1,657 sq km (37.14 per cent) while open mangrove covers an area of 1,642 sq km (36.81 per cent). The total tree cover for the country (national area with 70 per cent canopy density) has been estimated as 99,896 sq km or about 3.04 per cent.

The Ministry of Environment and Forests implements the Forest (Conservation) Act, 1980, which deals with grant of forestry clearances for diversion of forests land for non-forestry purposes in respect of development projects like power, roads, railways, irrigation, mining, schools, defence, drinking water, resettlement and rehabilitation of people etc. This act is regulatory in nature, and not prohibitory. Six Regional offices of the Ministry located at Bangalore, Bhopal Bhubaneswar, Lucknow, Shillong and Chandigarh, also monitor the ongoing forestry projects and schemes

with specific emphasis on conservation of forests and follow-up action on the implementation of conditions and safeguards laid down by the Ministry while granting clearance to development projects under FCA / EPA.

FOREST POLICY AND LAW

India is one of the few countries which have a forest policy since 1894. It was revised in 1952 and again in 1988. The main plank of the forest policy is protection, conservation and development of forests. Its aims are: (i) maintenance of environmental stability through preservation and restoration of ecological balance; (ii) conservation of natural heritage; (iii) check on soil erosion and denudation in catchment areas of rivers, lakes and reservoirs; (iv) check on extension of sand dunes in desert areas of Rajasthan and along coastal tracts; (v) substantial increase in forest tree cover through massive afforestation and social forestry programmes; (vi) steps to meet requirements of fuelwood, fodder, minor forest produce and soil timber for rural and tribal populations; (vii) increase in productivity of forests to meet the national need; (viii) encouragement to efficient utilization of forest produce and optimum substitution of wood; and (ix) steps to create massive people's movement with involvement of women to achieve the objectives and minimise pressure on existing forests. As forestry has undergone many conceptual changes since the adoption of Indian Forest Act, 1927, it was decided to bring suitable amendments to this Act. The tenure of the Commission was extended upto 31st March, 2006. A National Forestry Action Programme (NFAP) has also been formulated as a comprehensive strategic long-term plan for the next 20 years. The objective of the NFAP is to bring one-third of the area of the country under tree / forest cover and to arrest deforestation.

Pursuant upon the recommendation made by the Indian Board of Wildlife in its 21st Meeting held on January 21, 2002 under the Chairmanship of Hon'ble Prime Minister of India, the National Forest Commission, with Justice B.N. Kirpal, ex-Chief Justice of India as chairman and six other members was constituted vide resolution dated 7th February,2003 of Ministry of Environment & Forests. After interacting with various stakeholders and State / UT Government, the Commission submitted its report to the Hon'ble Prime Ministry on March 28,2006.

The Report has 23 chapters, of which 20 chapters from 2 to 21, deal with various subjects like "Forest Policy", Legal Framework", "Forest Administration", "Personal Management", etc. However realizing the importance of specific issues, topics like "Forests of North East" "Agro Forestry and Social Forestry", "Forests in Natural Resources Accounting" and "Financial Support" have been dealt with in separate chapters.

There are 360 recommendations in the report. Action on these recommendations is to be taken by Government of India as well as State Governments. Some Salient features of the recommendations are as follows:

- No change has been suggested in NFP, 1988.
- Need to undertake scientific research to assess the optimum forest / tree cover according to forest type and topography to meet the intended objectives has been emphasized.
- Amendment of Indian Forest Act, 1927.
- Forest Department should implement the Biological Diversity Act, 2002 and Environment Protection Act.
- No amendment and further dilution to Forest Conservation Act, 1980.

- Re-scheduling of species under Wildlife Protection Act to avoid man-animal conflict etc.

INTEGRATED FOREST PROTECTION SCHEME

The IFPS has been formulated by the merger of two schemes of the 9th Five Year Plan viz. 'Forest Fire Control and Management and 'Bridging up of Infrastructural Gaps in the Forestry Sector in the North Eastern Region and Sikkim. It is operational from 2002-03. The scheme covers all the States and UTs for the 10th Five Year Plan period. The Central Sector Component of the scheme is implemented by the Ministry in association with other organizations.

WILDLIFE

The National Wildlife Action Plan provides the framework of the strategy as well as the programme for conservation of wildlife. The first National Wildlife Action Plan (NWAP) of 1983 has been revised and the new Wildlife Action Plan (2002-2016) has been adopted. The Indian Board of Wildlife, headed by the Prime Minister, is the apex advisory body overseeing and guiding the implementation of various schemes for wildlife conservation.

The Third meeting of the National Board for Wildlife was held on June 19, 2006 under the Chairmanship of Hon'ble Prime Minister. The important decisions taken during the meeting include an alternate home for lions; survey for assessing the current status of peacocks in the country; preparation of an action plan for conservation of the red jungle fowl; identification of wetlands outside the Protected Area system for conservation etc.

The Wildlife (Protection) Act, 1972 was amended in 2006 to incorporate the creation of the National Tiger Conservation Authority. The amendment was notified on September 4, 2006. The first meeting of the National Tiger Conservation Authority was held on November 6, 2006.

Project Tiger was launched in 1973 with a mandate to conserve tigers in a holistic manner. Its mandate was to be fulfilled by facilitating focused, concerted management of ecotypical reserves in various sates, constituted on a core-buffer strategy through funding the technical support including site-specific inputs to elicit local community support for conservation. The Project has been successfully implemented and at present there are 28 Tiger Reserves in 17 States, covering an area of 37,761 sq. km. This has now been renamed as the National Tiger Conservation Authority.

Under the Project Elephant, which was launched in February 1992, States that have a free-ranging population of wild elephants are being given financial as well as technical and scientific assistance to ensure long-term survival of identified viable populations of elephants in their natural habitats.

Twenty five Elephant Reserves were notified by various state governments and consents were given for three, Baitarani and South Orissa in Orissa and Ganga-Jamuna in UP.

The Central Zoo Authority (CZA) was created by the Government through an amendment of Wildlife (Protection) Act in 1992 to enforce minimum standards and norms for the upkeep and healthcare of animals in Indian Zoos and to restrain mushrooming of unplanned and ill conceived zoos that were cropping up as adjuncts to public parks, industrial complexes and the wayside.

A national policy on zoos prepared by the Authority provides appropriate directions to the Government and other zoo operators.

The Animal Welfare Division became a part of the Ministry of Environment of Forests in July 2002. Earlier, the Division was under the Ministry of Statistics and Programme Implementation. The mandate of the Animal Welfare Division is to prevent the infliction of unnecessary pain or suffering on animals. The main task of the Division is to implement effectively the various provisions of prevention of Cruelty to Animals Act, 1960. Under this Act, a number of Rules have been framed for various purposes.

A National Institute of Animal Welfare (NIAW) at Ballabhgarh, Faridabad has been established to impart training and education in animal welfare and veterinary science. The institute aims at creating an enabling environment for the fulfillment of statutory requirements under the Prevention of Cruelty to Animals Act, 1960.

Animal Welfare Board of India (AWBI) is a statutory body under Section 4 of the Prevention of Cruelty to Animals Act, 1960 with its headquarters at Chennai. Its basic mandate is to advise the Government on animal welfare issues, and create awareness regarding animal welfare. AWBI gives financial assistance to the eligible Animal Welfare Organisations for Shelter Houses, Model Gaushalas, for setting up Bio-Gas Plants, Famine / Drought Relief, Earthquake Relief, etc., in the various states.

ENVIRONMENTAL IMPACT ASSESSMENT

For sustainable development and optimal use of natural resources, environmental considerations are required to be integrated in planning, designing and implementation of development projects. Environmental Impact Assessment (EIA) is one of the proven management tools for incorporating environmental concerns in the development process and also in improved decision making. The programme of EIA, in vogue in the Ministry for the last two decades was initiated with the appraisal of River Valley Projects. The scope of appraisal was subsequently enlarged to cover other sectors like industrial projects, thermal power plants, mining schemes and infrastructure projects. To give legislative status to the procedure of impact assessment, EIA was made mandatory since January 1994 for thirty-two categories of development activities. Taking into consideration the current development in the field of environmental impact assessment for prediction and analysis, a questionnaire of EIA has been prepared which is also useful in apprising agencies and decision makers, both at Central and State Levels. The Ministry has initiated a number of activities to streamline the appraisal process in terms of simplification of procedures, involvement of stakeholders through public hearing, regular meetings of Expert Committees, etc. This has resulted in expeditious decisions on development projects. Some amendments have been made in the EIA and Coastal Regulation Zone (CRZ) Notifications based on consultations with all the stakeholders. To ensure transparency, the status of forest and environmental clearance has been brought out on website : http: / / envfor.nic.in since February 1999. Depending on the nature of the project, certain safeguards are recommended. For monitoring and timely implementation of the safeguards suggested, six regional offices of the Ministry have been set up at Shillong, Bhubaneswar, Chandigarh, Bangalore, Lucknow and Bhopal. The Ministry has taken steps from time to time to streamline and rationalize the environmental clearance procedure by amending the EIA Notification and by formulating policy measures.

Expert Committees under the provision of EIA Notification of 27th January, 1994 have been constituted for different sectors for appraisal of projects received for environmental clearance. The various development-related sectors under which different Expert Committees have been constituted are a) Industry; b) Thermal Power; c) River Valley and Hydroelectric; d) Mining; e) Infrastructure and Miscellaneous; f) Nuclear; and g) New Construction Projects and Industrial Estates.

Over the period, certain bottlenecks, limitations / constraints were observed in the smooth implementation of the Notification. The Ministry has, therefore, undertaken a comprehensive review of the existing Environmental Clearance Process for further enhancing the quality of the appraisal and to shorten the time in decision making within the prescribed statutory period. After holding extensive consultations with the stakeholders over a period of one year, a draft notification on the revised environmental clearance process was notified on September 15, 2005 inviting objections and suggestion from the public within sixty days. After due consideration of all the suggestions received, the Ministry issued the final Notification of the revised Environmental clearance Process on September 14, 2006 superceding the EIA Notification 1994.

The reengineered environmental clearance process after the EIA notification 2006 has been decentralized for a certain categories of projects termed as category 'B' projects, which are below a particular threshold level. Such projects will be appraised at the state level by constituting a State Level Environmental Impact Assessment Authority (SEIAA) and State Level Export Appraisal Committee (SEAAC). These will be constituted by the Central Government in consultation with the State Govts. / UT Administrations. For construction projects considerable simplification in the application and appraisal procedures has been proposed, so that development of this sector is not retarded. Such projects have been exempted from the public hearing also. The notification also provides for exemption from public hearing for certain categories / types of projects. The interim operational guidelines providing inter-link between 'EIA Notification 1994 and 2006 has been issued by the Ministry and the same are available on the website of the Ministry.

ABATEMENT OF POLLUTION

Realising the deteriorating air and water quality, increasing vehicular emissions and higher noise levels, the Ministry adopted a policy for abatement of pollution which provides a multi-pronged strategies in the form of regulations, legislations, agreements, fiscal incentives and other measures. Over the years the emphasis has shifted from curative measures to pollution prevention and control through adoption of clean and low-waste technology, re-use and recycling, natural resource accounting, environmental audit and human resource development. To give effect to environmental measures and policies for pollution control, various steps have been initiated which include stringent regulations, development of environmental standards, control of vehicular pollution, spatial environmental planning including Industrial Estates and preparation of a Zoning Atlas. The scheme on Development and Promotion of Clean Technologies, therefore, aims at promoting such technologies and strategies.

Submission of an Environmental Statement by polluting units, seeking consent either under the Water (Prevention and Control of Pollution) Act, 1974 or the Air (Prevention and Control of Pollution) Act, 1981 or both and the Authorisation under the Hazardous Wastes (Management and Handling) Rules, 1989, has been made

mandatory through a Gazette Notification of April 1993 under the Environment (Protection) Act, 1986. The primary benefit of environmental audit is that it ensures cost-effective compliance of laws, standards, regulations and company policies, etc.

The policy statement for abatement of pollution lays emphasis on preventive aspects of pollution abatement and promotion of technologies to reduce pollution. As a part of the Industrial Pollution Abatement through preventive strategies, financial assistance is being provided for the establishment and running of waste minimization circles in clusters of small scale industries, capacity building in areas of cleaner production, establishment of demonstration units in selected industrial sectors, etc. Industrial Pollution Prevention Strategies including waste-minimization with an objective to optimize the consumption of raw material, save energy requirement and reduce waste generation have been designed. This is achieved by utilizing the existing production facility without changing the operations in small and medium enterprises in adoption of cleaner production practices.

A Network of Ambient Air Quality Monitoring Programme (NAMP) covering 326 monitoring stations covering 116 towns / cities in 28 states and four UTs in the country has been set up by the Central Pollution Control Board in coordination with the State Pollution Control Boards / Pollution Control Committees and other Institutions for carrying out regular monitoring. The major objectives of the programme are: (i) to ascertain whether the notified ambient air quality standards are maintained; (ii) to control and regulate pollution from various sources; (iii) to understand the natural cleansing process that takes place in the environment through pollution dilution, dispersion, wind based movement, dry deposition, precipitation and chemical transformation of pollutants generated; and (iv) health impacts.

Under National Air Quality Monitoring Programme (NAMP), four air pollutants viz., Sulphur Dioxide (SO_2), Oxides of Nitrogen as NO_x, Suspended Particulate Matter (SPM) and Respirable Suspended Particulate Matter (RSPM / PM_{10}), have been identified for regular monitoring at all the locations. Besides this, additional parameters such as Respirable Lead and other toxic trace metals and Polycyclic Aromatic Hydrocarbons (PAHs) are also being monitored.

As vehicular emissions are the major cause for deterioration of urban ambient air quality, the Ministry of Environment and Forests is facilitating and coordinating the control of vehicular pollution in the field with the concerned Ministries and their associated bodies / organizations including the Ministry of Surface Transport, the Ministry of Petroleum and Natural Gas and the Ministry of Industry in areas such as up-gradation of automobile technology, improvement in fuel quality, expansion of urban public transport systems and promotion of integrated traffic management, etc. The Gross Emission Standards for vehicles have been prescribed from time to time. As per Auto Fuel Policy, Bharat State-II norms for new vehicles have been introduced throughout the country from 1st April, 2005. However EURO-III equivalent emission norms for all new vehicles except 2 and 3 wheeled vehicles have been introduced in 11 cities from 1.4.2005. To meet Bharat State-II, EURO-III & EURO V emission norms, matching quality of Petrol and diesel is being made available.

The task forces comprising experts and members from institutions and industry associations for implementation of the Charter on Corporate Responsibility for Environmental Protection continued to meet regularly to monitor and to provide necessary guidance to the industries for adopting requisite pollution abatement measures during the year.

CENTRAL POLLUTION CONTROL BOARD

The Central Pollution Control Board (CPCB), an autonomous body of the Ministry, was set up in September 1974, under the provisions of the Water (Prevention and Control of Pollution) Act, 1974. It coordinates the activities of the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs), and also advises the Central Government on all matters concerning the prevention and control of environmental pollution. CPCB, SPCBs and PCCs are responsible for implementing the legislation, regulations and guidelines relating to prevention and control of pollution; they also develop rules and regulations which prescribe the standards for emissions and effluents of air and water pollutants and noise levels. CPCB also provides technical services to the Ministry for implementing the provisions of the Environment (Protection) Act, 1986 such as Hazardous Waste (Management and Handling) Rules, 1989 amended in 2000; Bio-Medical Waste (Management and Handling) Rules, 1998; Municipal Solid Waste (Management & Handling) Rules, 2000; Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 amended in 2000 and Recycled Plastic Manufacture and Usage Rules 1999, amended in 2003.

Seventeen categories of heavily polluting industries have been identified. They are: cement, thermal power plants, distilleries, sugar, fertilizers, integrated iron and steel, oil refineries, pulp and paper, petrochemicals, pesticides, tanneries, basic drugs and pharmaceuticals, dye and dye intermediates, caustic soda, zinc smelter, copper smelter and aluminium smelter.

The CPCB in collaboration with concerned SPCBs / PCCs established a wide network of water quality monitoring stations. The present network comprises of 1019 stations in 27 states and six UTs spread over the country. The monitoring network covers 200 rivers, 60 lakes, 5 tanks, three ponds, three creeks, 13 canals, 17 drains and 321 wells.

MANAGEMENT OF HAZARDOUS SUBSTANCES

The Hazardous Substances Management Division is the nodal point within the Ministry for planning and over-seeing the implementation of policies and programmes on management of hazardous substances and chemical emergencies. The objective is to promote safe handling, management and use of hazardous substances including hazardous chemicals and hazardous wastes in order to prevent potential damage to health and environment. The activities are carried out under three thrust areas, i.e., Chemical Safety, Sound Management of Hazardous Wastes and Municipal Solid Wastes. Various Rules have been notified to ensure environmentally sound management of hazardous substances and wastes in the country.

The Rules notified are implemented in association with CPCB / SPCBs / PCCs and regular monitoring is carried out by the Ministry. The Rules are also modified / amended from time to time to rationalize and streamline the policies and programmes to ensure environmentally sound management of hazardous substances.

A Central Control Room has been set-up in the Ministry to deal with emergencies arising from hazardous chemicals. A Crisis Alert System has also been established. A comprehensive National Chemical Profile is being prepared.

The Ministry continues to follow up the implementation of the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

As per Hazardous Waste Rules, all hazardous wastes are required to be treated and disposed afterwards in an environmentally sound manner as prescribed. During the 10th Plan period, the focus is on the setting up of Common Treatment, Sewage and Disposal Facilities (TSDFs) in different parts of the country.

The Municipal Solid Wastes (Management and Handling) Rules, 2000, Fly-ash Notification 1999 and the Recycled Plastics (Manufacture and Usage) Rules, 1999 amended in 2003 constitute the regulatory framework for the management of solid wastes in the country. Use of fly-ash in construction, laying of roads and reclamation of low-lying areas has been made mandatory. Guidelines for use of fly-ash have also been formulated and circulated to the State Governments.

The Batteries (Management and Handling) Rules, 2001 were notified in May 2001 to regulate the collection, channelisation and recycling of used lead acid batteries in the country. These rules inter-alia make it mandatory for consumers to return used batteries. All manufacturers / assemblers / reconditioners / importers of lead acid batteries are responsible for collecting used batteries against new ones sold as per a schedule defined in the Rules.

The Ministry is also the nodal point for three International Conventions, namely, the Basel Convention on the Control of Trans-boundary Movement of Hazardous Wastes and their Disposal (party as on –since 1992), the Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (party as on May 24, 2005), and the Stockholm Convention on Persistent Organic Pollutants (POPs) (party as on Sept, 2005).

CONSERVATION OF WATER BODIES

The National River Conservation Directorate (NRCD) under the Ministry is engaged in implementing the River and Lake Action Plans under the National River Conservation Plan (NRCP) and National Lake Conservation Plan (NLCP) by providing assistance to State Governments. The objectives of NRCD is to improve the water quality (up to bathing class) of the rivers, which are the major fresh water sources in the country through the implementation of pollution abatement schemes in 160 towns along polluted stretches of 34 rivers spread over twenty states.

Under the NRCP, a total of 34 rivers have been covered so far to take up several important activities like interception and diversion works to capture the raw sewage flowing into the river through open drains and divert them for treatment, setting up of Sewage Treatment Plants for treating the diverted sewage, construction of low-cost sanitation toilets to prevent open defecation on river banks, construction of Electric Crematoria and Improved wood cremation to conserve wood and help in ensuring proper cremation of bodies brought for final rites.

The Gomti Action Plan Phase-II at Lucknow has been sanctioned and the project cost is to be shared in the ratio of 70:30 between GOI and the State Government. The works of this phase will include two sewage treatment plants of a total capacity of 375 MLD (over and above the 42 MLD capacity being set up in the first phase). Out of the 30 projects included in Gomti Action Plan, the Phase II works on 24 projects has been taken up.

Under Other Rivers Action Plan, pollution abatement works are also being taken up in 64 towns along 29 other rivers in 14 states of the country. Of the 344 projects of pollution abatement sanctioned so far, 202 projects have been completed. About 3154 million litres per day (MLD) of sewage is targeted to be intercepted, diverted and treated.

Under the Lake Conservation Plan, works on 42 lakes was taken up so far in 12 states.

REGENERATION AND ECO-DEVELOPMENT

The National Afforestation and Eco-Development Board (NAEB) was set up in August 1992 for promoting afforestation, tree planting, ecological restoration and eco-developmental activities in the country. Special attention is being given to regeneration of degraded forest areas and lands adjoining forest areas, national parks, sanctuaries and other protected areas as well as the ecologically fragile areas like the Western Himalayas, the Aravallis, the Western Ghats, etc.

The NAEB has evolved specific schemes to promote afforestation and management strategies, that would help the States in developing specific afforestation and eco-development packages for augmenting biomass production through a participatory planning process of Joint Forest Management (JFM).

NAEB operates following three schemes:

a) National Afforestation Programme (NAP)

b) NAEB scheme. The major components of the scheme are:

  i) Grants-in-aid for Greening India (GIA for GI)

  ii) Monitoring and Evaluation (M&E)

  iii) Communication

  iv) Support to Regional Centres (RG) and

c) Eco Development Forces (EDF) Scheme

National Afforestation Programme (NAP) : The National Afforestation Programme (NAP) continues to be the flagship scheme of NAEB in so much as it provides support, both in physical and capacity building terms, to the Forest Development Agencies (FDAs) which in turn are the main organs to move forward institutionalization and implementing Joint Forest Management. The FDA has been conceived and installed as a federation of Joint Forest Management Committees (JFMCs) at the Forest Division level to undertake holistic development in the forestry sector with peoples' participation. This is a paradigm shift from the earlier afforestation programmes wherein funds were routed through the State Governments. The decentralized two-tier institutional structure (FDA & JFMC) allows for greater participation of the people in both the planning and implementation, to improve forests and livelihood of the people in and around forest areas. The village is reckoned as a unit of planning and implementation and all activities under the programme are conceptualized at the village level. The two-tier approach apart from building capacities at the grassroot level significantly empowers the local people to participate in the decision making process under the Entry Point Activities and community assets are created with a 'care and share' concept.

Seven hundred and fifteen FDAs have been operationalised to treat a total area of 9.24 lakhs ha. (as on Oct. 31, 2006). Rehabilitation of Jhum-lands have been given adequate focus under NAP during the current plan period.

Grant-in-aid for Greening India : The earlier Grant-in-aid to the Voluntary Agencies Scheme has been restructured as 'Grant-in-aid for Greening India'. It has two sub-components: i) production of and awareness generation about high quality planting material and ii) Grants to Voluntary agencies and other bodies for taking up

plantation of high quality planting material. For production of high quality planting material (QPM) support is provided for setting up of a central nursery by the State Forest Department and satellite nurseries by various organisations and individuals.

Eco-Development Forces (EDF) : The Eco-Development Force was established in 1980 as a scheme of implemented through the Ministry of Defence for ecological restoration of terrains, rendered difficult either due to severe degradation or remote location or any other exigencies. The scheme of Eco-Development Forces is based on two objectives: that of ecological restoration and employment generation for able bodied ex-servicemen. Under this scheme, the establishment and operational expenditure on Eco-Task Force (ETF) Battalion raised by Ministry of Defence (MoD) is reimbursed by the Ministry while the input like sapling fencing etc. as also the professional and managerial guidance is provided by the State Forest Departments. Four ETF battalions are being supported under the EDF Scheme. These battalions are located at Pithoragarh, Samba, Jaiselmer (Mohangarh) and Dehradun. Two new battalion have been approved in Assam.

Joint Forest Management Cell (JFM) : The Joint Forest Management (JFM) Cell has been established in 1998 to monitor JFM programme and generate policy response. Major activities of JFM Cell are as follows: Guidelines which envisages involvement of women in JFM activities, extension of JFM to good forests is done to better NTFP management and legal back up to Committees. Signing of MOUs between states and JFMCs to give them the sense of belonging and integration of working plans and micro plans have been issued. JFM network for consultation between stakeholders and for policy developments have been operationalised. All States have adopted it.

UN Convention to Combat Desertification : The objective of the convention is to Combat Desertification and mitigate the effects of drought in countries experiencing it, through effective action at all levels supported by the International Convention and Partnership. The Third National Report on Implementation of UNCCD in India was prepared and submitted to the UNCCD Secretariat. The 7th meeting of Asian Focal Point of UNCCD was held at Bangkok during August, 2006, which discussed effective ways to implement the UNCCD processes, resource mobilization and other critical issues, in preparation to CRIC-5 Meeting of UNCCD.

UNDP has launched the National Self-Capacity Need Assessment on land degradation in India to identify country level priorities and needs for capacity building to address global environmental issues, in particular the CBD, UNFCC and Combating Desertification with the aim to catalyzing domestic and / or externally assisted action to meet those needs in a coordinated and planned manner.

Environmental Research : Environmental Research is a Central Plan Scheme of the Ministry for the promotion of research in Multidisciplinary aspects of environmental protection, conservation and development. The objective of the scheme is to generate the required information to develop strategies, technologies and methodologies for better development. It also aims at attempting a solution to practical problems of resource management, conservation of natural resources and eco regeneration of degraded areas. Further, the scheme also seeks to strengthen infrastructure facilities and scientific manpower to shoulder the responsibility of environmental management in the country. Research grants are provided in the identified thrust areas to various institutions / universities and non-governmental organization all over the country after necessary examination, peer review and recommendation of Expert Committees. A Research Advisory Committee (RAC) constituted in the Ministry scrutinizes and

recommends the research proposals to the concerned Expert Committees for consideration of funding. These are supported by three programmes of the Ministry (i) Environment Research Programme; (ii) Ecosystem Research Programme; (iii) Research Programme on the Eastern and Western Ghats.

The G.B. Pant Institute of Himalayan Environment & Development (GBPIHED), Almora established by the Ministry in 1988 as an autonomous research and development institute of the Ministry has emerged as a leading institution for fostering scientific knowledge, formulation of policy guidelines and development of efficient strategies for conservation and management of natural resources of the Indian Himalayan region (IHR).

Forestry Research : The Indian Council of Forestry Research and Education (ICFRE) is the apex body in the national forestry research system to develop a holistic forestry research through planning, promoting, educating and coordinating research education and extension of all aspects of forestry.

The following forestry research institutes and centres under the Council are responsible for undertaking research in their respective eco-climatic zones: (i) Forest Research Institute, Dehradun; (ii) Arid Forest Research Institute, Jodhpur; (iii) Rain Forest Research Institute, Jorhat; (iv) Institute of Wood Science and Technology, Bangalore; (v) Tropical Forestry Research Institute, Jabalpur; (vi) Institute of Forest Genetics and Tree Breeding, Coimbatore; (vii) Himalayan Forest Research Institute, Shimla; (viii) Institute for Forest Productivity, Ranchi; (ix) Centre of Social Forestry and Eco-rehabilitation, Allahabad; and (x) Institute of Forestry Research and Human Resources Development, Chhindwara. In addition, the Indian Plywood Industries Research and Training Institute, Bangalore, an autonomous body of the Ministry, is a premier institution engaged in research and training activities on mechanical wood industries technology and the Indian Institute of Forest Management, Bhopal, an autonomous organization of the Ministry also undertakes training, research and consultancy in forest management.

Wildlife Research : Research programmes in wildlife are carried out by the Wildlife Institute of India, Dehradun, and the Salim Ali Centre for Ornithology and Natural History, Coimbatore. Several projects on habitat evolution, elephant movement, ecology of gharials (alligators) and turtles, status of endangered species, behavioral ecology, biodiversity, resource study conservation, ecology and management of specific animals, etc., are being carried out by both these Institutes. They conduct research on the ecological, biological, socio-economic and management aspects of wildlife conservation of various parts of country.

NATIONAL NATURAL RESOURCES MANAGEMENT SYSTEM

The basic objective of the National Natural Resources Management System (NNRMS) is the utilization of Remote Sensing Technology with the conventional methods of monitoring of natural resources such as land, water, forests, minerals, ocean etc. for attaining sustainable development by addressing the following aspects : i) Optimal utilization of the country's natural resources by a proper and systematic inventory of the resource availability ii) Reducing regional imbalance by effective planning in tune with the development efforts iii) Maintain the ecological balance with a view to evolve and implement the environmental guidelines. The Standing Committee on Bio-resources and Environment (SC-B) constituted by the Planning Commission advises on the methods of using the remote sensing technology for optimal use and management of natural resources in the country.

ENVIRONMENTAL EDUCATION, AWARENESS AND TRAINING

The Environment Education, Awareness and Training is an important scheme of the Ministry for enhancing the understanding of people at all levels about the relationship between human beings and the environment and to develop capabilities / skills to improve and protect the environment. The scheme was launched in 1983-84 with the following basic objectives i) To develop education / teaching materials and aids in the formal education sector; ii) To encourage non-governmental organizations, mass media and other concerned organizations for promoting environmental awareness among the people at all levels; iii) To promote environmental education through existing educational / scientific / research institutions; iv) To ensure training and non-power development in environmental education and v) To mobilize people's awareness for the preservation and conservation of environment.

The Ministry also accords priority for the promotion of non-formal environmental education and creation of awareness among all sections of the society. It organizes seminars / symposia / workshops, training programmes, National Green Corps (NGC), eco-clubs, for mass awareness etc. A National Environmental Awareness Campaign (NEAC) is organized every year on a particular theme. The Global Learning and Observation to Benefit the Environment (GLOBE), and International Scheme and Education Programme with stress on hands-on participatory approach still continue their good work.

The National Museum of Natural History (NMNH) set up in New Delhi in 1978, is concerned with the promotion of non-formal education in the area of various aspects of environment. The museum also conducts temporary exhibitions and a number of educational programmes and activities for school children, college youth and the general public. Three Regional Museums of Natural History have been established at Mysore, Bhopal and Bhubaneswar.

The Indian Council for Forestry Research and Education is the focal point of forestry education and extension development in the country. The Indira Gandhi National Forest Academy, Dehradun, imparts in-service training to Indian Forest Service (IFS) professionals. The Forest Survey of India (FSI) organizes training programmes for forestry personnel on various aspects such as application of remote sensing techniques in forestry, etc. State Forest Service College provide training to the officers of the State Forest Service (SFS). The Indian Plywood Industries Research and Training Institute, Bangalore, organizes short-term courses in the area of wood science. The Indian Institute of Forest Management, Bhopal, also provides training in forest management and allied subjects to persons from the Indian Forest Service, forest development corporations, and forest-related industries to develop forestry programmes. The Wildlife Institute of India, Dehradun, provides in-service training to forest officers, wildlife ecologies and other professionals for conservation and management of the wildlife resources of the country.

Nine Centres of Excellence have been set up by the Ministry to strengthen awareness, research and training in priority areas of Environmental Science and Management. The nine Centres of excellence are as follows:

i) Centre of Environmental Education, Ahmedabad

ii) CPR Environmental Education Centre, Chennai

iii) Centre for Ecological Sciences, Bangalore

iv) Centre of Mining Environment, Dhanbad
v) Salim Ali Centre for Ornithology and Natural History, Coimbatore
vi) Centre for Environmental Management of Degraded ecosystems, Delhi
vii) The Tropical Botanic Garden and Research Institute, Thiruvananthapuram
viii) Madras School of Economics, Chennai
ix) Foundation for the Revitalization of Local Health Tradition, Bangalore

ENVIRONMENTAL INFORMATION SYSTEM

Realizing the need of environmental information, the Ministry has set up an Environmental Information System (ENVIS) as a plan programme and as a comprehensive network in environmental information collection, collation, storage, retrieval and dissemination to varying users, which include decision makers, researchers, academicians policy planners, research scientists etc. ENVIS has been conceived as a distributed information network with the subject-specific centres to carry out the mandate and to provide the relevant and timely information to all concerned. An association of the various State Governments / UTs was also felt necessary in promoting the ENVIS network to cover a wide range of disciplines of subjects with the cooperation of the various State / UT Governments. Keeping this in view, the network was expanded gradually with the involvement of thematic subject areas and State Government departments to make it more comprehensive.

The ENVIS network at present, consists of a chain of 77 subject-specific and State related Centres called ENVIS Centres and are located in the notable organizations / institutions throughout the country. The Focal Point of ENVIS is located in the Ministry and coordinates the activities of all the ENVIS network partners to make ENVIS a web-enabled comprehensive information system.

A portal at URL http: / / www.envis.nic.in was launched to Network ENVIS Centres which provides a direct link to ENVIS network partners.

FELLOWSHIPS AND AWARDS

The Ministry instituted various fellowships and awards in the field of protection of environment, afforestation, biodiversity, wildlife conservation and development of Hindi writing in the field of environment and forests. These are i) The Indira Gandhi Paryavaran Puraskar (IGPP); ii) Pitamber Pant National Environment Fellowship Award; iii) B.P. Pal National Environment Fellowship Award; iv) Indira Priyadarshini Vrikshmitra Award (IPVM); v) Amritadevi Bishnoi Wildlife Preservation Award; vi) The Salim Ali National Wildlife Fellowship Award; vii) Shri Kailash Sankhala National Wildlife Award; viii) Rajiv Gandhi Wildlife Conservation Award; ix) Vishist Vaigyanik Puraskar; x) Medini Puraskar Yojana and xi) Janaki Ammal National Award in Taxonomy etc.

ENVIRONMENTAL LEGISLATION

The National Environment Policy (NEP), 2006 was formulated and published by the Ministry with the approval of the Union Cabinet. The Policy looks at the key environmental challenges, their causes and impacts, objectives and the principles underlying policy formulation and strategies, action programme to realize the objectives and mechanisms for implementation and review. It is intended to bring the environmental concerns in the mainstream of all developmental activities and relevant sectoral policies.

Ecomark Scheme : The 'ECO-MARK' scheme was launched by the Ministry in 1991 for labelling of environment-friendly consumer products which meet certain environmental criteria along with quality requirements of the Bureau of India Standards (BIS).

An Inter-Ministerial Consultative Group has been constituted by the Ministry with a view to developing a common position for multilateral negotiations in respect of several issues at the interface of 'Trade and Environment". Four generic issues have been identified by the Consultative Group for policy-oriented studies.

INTERNATIONAL COOPERATION AND SUSTAINABLE DEVELOPMENT

The International Cooperation and Sustainable Development (ICSD) Division is the nodal point within the Ministry for United Nations Environment Programme (UNEP), Nairobi, South Asia Cooperative Environment Programme (SACEP), Colombo and the matters relating to sustainable development. The Division also handles bilateral issues and matters pertaining to multilateral bodies such as the Commission on Sustainable Development, Global Environment Facility (GEF) and the regional bodies like Economic and Social Commission for Asia and Pacific (ESCAP), South Asian Association for Regional Cooperation (SAARC), European Union (EU) and the India-Canada Environment Facility.

The Ministry is also the nodal agency for various environment-related multilateral conventions and protocols. These include Convention on Wetlands of International Importance, especially Waterfowl habitat, Vienna Convention for the protection of the Ozone Layer, Montreal Protocol on Substances that deplete the Ozone Layer, Conventions on Biological Diversity, UN Framework Convention on Climate Change, Kyoto Protocol, the Basel Convention on Trans-boundary Movement of Hazardous Substances, Convention to Combat Desertification and Stockholm Convention on Persistent Organic Pollutants, etc.

During the year, India participated in many seminars / workshops i.e. 14th Session of CSD in New York from May 1-12, 2006 which reviewed the progress in the thematic areas viz. Energy for sustainable development; Industrial Development; Air Pollution / Atmosphere and Climate Change. On this occasion, India submitted its National Report entitled 'Energy for the Future – Making Development Sustainable" to the Commission on the above mentioned thematic areas; 24th Session of UNEP Governing Council / Global Ministerial Environment Forum (GMEF) was held from Feb. 5-9, 2007 in Nairobi, Kenya etc.

The Ministry has taken up several activities in the area of Sustainable Development like Preparation of State of Environment Report, Formulation of Sustainable Development Indicators (SDI), Formation of National Strategies for Sustainable Development, Global Public Goods and Partnership for Sustainable Development.

OZONE CELL

The Ministry has set up the "Ozone Cell" as a national unit to look after and to render necessary service to implement the Montreal Protocol and its Ozone Depleting Substances (ODS) phase out programme in India.

Global efforts to protect the ozone layer started in the early seventies leading to the adoption of the Vienna Convention on Ozone Depleting Substances (ODS) in 1985 and the Montreal Protocol in 1987. India acceded to the Montreal protocol,

along with its London Amendment in 1992. To meet the country's commitment on ODS, the Ministry has established an Ozone Cell. The Ministry provides custom / excise duty exemption for ODS phase-out projects and detailed guidelines / procedures have been finalized to grant duty exemption for new investments with non-ODS technologies. The Reserve Bank of India has issued directions to all financial institutions and commercial banks not to finance new establishments with ODS technology. A licensing system has been adopted to regulate import and export of ODS. A ban has also been imposed on trade of ODS with non parties. The Notified Ozone Depleting Substances (Regulation and Control) Rules, 2000, provides a legal framework for ensuring compliance of the Montreal Protocol. It sets the deadline for phasing out of various Ozone Depleting Substances, besides regulating CFCs in the manufacture of various products beyond 1 January 2003 except in metered dose inhalers and for other medical purposes. Similarly, use of halons is prohibited after 1 January 2001 except for essential uses. Other ODS such as carbon tetrachloride and methyl chloroform and CFC for metered dose inhalers can be used up to 1 January 2010. Further, the use of methyl bromide has been allowed up to 1 January 2015. The Ministry has notified Ozone Depleting Substances (Regulation and Control) Amendment Rules, 2004 on 16 Aug., 2004. The notification allows the enterprise for registration for Hydro-chloroflouro carbons (HCFCs) on or before 19th July, 2007.

India has so far met the following compliance dates as per the control schedule of the Montreal Proposal i) Freeze of CFC production and consumption in July, 1999 at 22588 ODP tons and 6681 ODP tons respectively ii) Freeze of Halon production on 1st January 2002. The Ministry has also established an Empowered Steering Committee chaired by the Secretary (E&F) which is supported by three Standing Committees. These Committees are responsible for the implementation of the Montreal Protocol provisions, review of various policy and implementation options, project approval and project monitoring.

India hosted the 18th Meeting of the Parties (MOP), 50th Meeting of the Executive Committee and other related meetings of the Montreal Protocol in New Delhi from Oct. 25-Nov. 10, 2006. The 18th MOP endorsed the election of India as member of the implementation Committee of the MOP for the years 2007 and 2008. Draft Rules called the Ozone Depleting Substance (Regulation & Control) Amemdment Rules, 2006 were presented to the MOP.

CLIMATE CHANGE

India is party to the United Nations Framework Convention on Climate Change (UNFCCC). The objective of the UNFCCC is to stabilize the Greenhouse Gas (GHG) concentration in the atmosphere at a level that would prevent dangerous human induced interference with the climate system. The convention enjoins upon the parties to communicate to the conference of parties through its Secretariat, the following elements of information : (i) a national inventory of anthropogenic emission by sources and removal by sinks of all greenhouse gases not controlled by Montreal Protocol, to the extent its capacity permits; (ii) A general description of steps taken or envisaged by the party to implement the convention; (iii) Any other information that the party considers relevant for achievement of the objectives of the convention. The Ministry is the executing and implementing agency of the project.

India acceded to the Kyoto Protocol in August 2002 and one of the objectives of acceding to the Kyoto Protocol was to fulfill the prerequisites for implementation of Clean Development Mechanisms (CDM) in accordance with the national sustainable

priorities. The Kyoto Protocol commits the developed countries, including economies in transition to reduce emissions of greenhouse gases by an average of 5.2 per cent below 1990 levels during 2008-12. A National CDM Authority was approved by the Cabinet in December 2003 and has since started functioning. Meeting of National Clean Development Mechanism (CDM) Authority was held periodically to consider the CDM Projects for grant of Host Country approval. Till 28th Feb, 2007, the National CDM authority has approved 526 projects in the various fields of biomass based cogeneration. The Authority has so far approved many projects mainly in the field of Renewable Energy, Municipal Solid Waste, Hydrofluorocarbons (HFCs), Small Hydro and Energy Efficiency, etc. It is expected that implementation of these projects would help in attracting foreign investment as well access to more efficient technologies.

13 Finance

THE Ministry of Finance is responsible for administration of finances of the Government. It is concerned with all economic and financial matters affecting the country as a whole including mobilisation of resources for development and other purposes. It regulates expenditure of the Government including transfer of resources to the states. This Ministry comprises four departments, namely, (i) Economic Affairs, (ii) Expenditure, (iii) Revenue, and (iv) Disinvestment.

ECONOMIC AFFAIRS

The main divisions of the Department of Economic Affairs are viz., (i) Finance Division, (ii) Budget Division, (iii) Banking and Insurance Division, (iv) Capital Market, (v) Bilateral Co-operation, (vi) Foreign Trade, (vii) Fund Bank Division, (viii) Fiscal Responsibility and Budget Management (FRBM) and Administration, (ix) Controller of Aid, Accounts and Audit, (x) Economic Division. The Department inter alia monitors current economic trends and advises the Government on all matters having bearing on internal and external aspects of economic management including, prices, credit, fiscal and monetary policy and investment regulations. This Department also supervises policies relating to Nationalised Banks, Life and General Insurance besides managing Government of India Mints, Currency Presses, Security Presses and Security Paper Mills. All the external financial and technical assistance received by India, except through specialised International organisations like FAO, ILO, UNIDO and except under international / bilateral specific agreement in the field of science and technology, culture and education are also monitored by this Department. The DEA is also responsible for preparation and presentation to the Parliament of Central Budget and the Budgets for the State Governments under President's Rule and Union Territory Administrations.

Recent Developments: The Budget 2005-06 highlights the need to maintain a growth rate of 7 to 8 per cent per annum as mandated by the National Common Minimum Programme (NCMP). The major initiative to reduce poverty and unemployment include higher allocation for National Rural Employment Guarantee Scheme (previously National Food for Work Programme) and increasing the coverage to 2.5 crore families under the Antyodaya Anna Yojana. The major areas identified for greater thrust include higher allocation for midday meal scheme, higher allocation to a non-lapsable fund called Prarambhik Shiksha Kosh created for funding the Sarva Shiksha Abhiyan programme, improving facilities for drinking water and sanitation, roadmap for agricultural diversification, development / strengthening of agricultural marketing infrastructure, continuation of National Agricultural Insurance Scheme (NAIS) for kharif and rabi 2005-06 and enhanced target under micro-finance for credit-linking from two lakh Self Help Groups (SHGs) to 2.5 lakh SHGs.

The budget redesignating the Micro Finance Development Fund as the "Micro Finance Development and Equity Fund" provides for an increased corpus of Rs 200 crore. The National Project for the repair, renovation and restoration of water bodies would include pilot project for 16 districts in nine States to cover nearly 700 water bodies, 20,000 hectares of additional land to be brought under irrigation, outlay of Rs 180 crore in 2005-06 for flood management and erosion control in the Ganga basin, Brahmaputra and Barak valleys and Rs 52 crore for the Farakka Barrage Project.

Recognising the need for greater manufacturing thrust, the budget proposed to launch a "Manufacturing Competitiveness Programme" to help small and medium enterprises. Higher allocation for Technology Upgradation Fund for the textile sector and increasing the coverage under rural electrification are other significant initiatives. The allocation for Indira Awas Yojana has been increased to Rs 2,750 crore in 2005-06 and about 15 lakh houses are proposed to be constructed during the year.

The Budget 2005-06 stressing the need for overall development of the country has conceived 'Bharat Nirman' to be implemented over a period of four years.

The goals of Bharat Nirman are: (a) to bring an additional one crore hectares under assured irrigation; (b) to provide road connectivity to all villages that have a population of 1000 (or 500 in hilly / tribal areas); (c) to construct 60 lakh additional houses for the poor; (d) to provide drinking water to the uncovered remaining 74,000 habitations; (d) to ensure electricity to the remaining 1,25,000 villages and electricity connection to 2.3 crore households; and (f) to give telephone connectivity to the remaining 66,822 villages.

The implementation of Bharat Nirman has gathered pace. It was therefore decided to extend larger budgetary support of this programme. Including the North East component, as against Rs 12,160 crore provided in 2005-06, the corresponding budgetary provision for the programme was placed at Rs 18696 for 2006-2007, an increase of 54 per cent.

The Budget 2006-07 mentioned that assured irrigation credit, diversification and creating a market for agricultural products are the thrust areas for the agriculture sector.

The programme for repair, renovation and restoration of water bodies is being implemented through pilot projects in various States. The design of the programme has been finalised in consultation with the States. In the first phase of the project 20,000 water bodies with a command area of 1.47 million hectares have been identified. The Budget 2006-07 also announced that the National Agricultural Insurance Scheme will be continued for kharif and rabi 2006-07. The public-private partnership model will be employed to set up model terminal markets in different parts of the country. The budget provided a sum of Rs 150 crore for 2006-07 under the National Horticulture Mission.

SOCIAL SECTOR PROGRAMMES

During 2006-07, enhanced outlays have been provided for a number of initiatives / programmes in the social sectors. The bulk of the enhanced resources for the social sectors were earmarked for the UPA Government's eight flagship programmes: Sarva Siksha Abhiyan. Mid-day Meal Scheme, Rajiv Gandhi Drinking Water Mission, Total Sanitation Campaign, National Rural Health Mission, Integrated Child Development Services, National Rural Employment Guarantee Scheme and Jawaharlal Nehru National Urban Renewal Mission.

Education and health continued to enjoy primacy. For 2006-2007, the allocation for education has been enhanced by 31.5 per cent to Rs 24115 crore and for health and family welfare by 22.0 per cent to Rs 12546 crore.

On the eight flagship programmes, the total allocation in 2005-2006 was Rs 34927 crore. In the current fiscal year, the total allocation has been placed at Rs 50015 crore, representing an additionality of Rs 15088 crore or 43.2 per cent.

Sarva Siksha Abhiyan (SSA) : Recognising good performance, outlay for SSA has been increased from Rs 7156 crore in 2005-06 to Rs 1004 crore in 2006-07. Target is to construct 500,000 additional class rooms and to appoint 1,50,000 more teachers.

During 2006-07, it has been decided to transfer Rs 8746 crore to the Prarambhik Siksha Kosh from the revenues raised through the education cess.

Mid-day Meal Scheme : 12 crore children are so far covered under the Mid-day Meal Scheme, which is the largest school lunch programme in the world. Allocation for this programme has been enhanced from Rs 3010 crore to Rs 4813 crore in 2006-2007.

Drinking Water and Sanitation : A provision has been made for non-recurring assistance of Rs 213 crore in 2006-07 for setting up district-level water testing laboratories and field-level water testing kits. For Rajiv Gandhi National Drinking Water Mission the allocation has gone up from Rs 3645 crore last year to Rs. 4680 crore in the current year. Provision for the Rural Sanitation Campaign has also gone up from Rs 630 crore in the last year to Rs 720 crore in 2006-2007.

National Rural Health Mission : The National Rural Health Mission was launched on 12 April 2005. In 2006-07, more than 200,000 Associated Social Health Activists (ASHA) are likely to be fully functional and over 1000 Block level community health centres are expected to provide round-the-clock services. The allocation for NRHM has been enhanced from Rs 6553 crore in 2005-06 to Rs 8207 crore for the current year.

Integrated Child Development Services (ICDS) : The total allocation for ICDS has been increased from Rs 3315 crore to Rs 4087 crore.

National Rural Employment Guarantee Scheme : The Rural Employment Scheme is the primary instrument of the Government to combat rural unemployment and hunger poverty. For 2006-07, the total allocation for rural employment is of the order of Rs 14300 crore. Of this, Rs 11300 crore (including NER component) will be under NREG Act and Rs 3000 crore (including NER component) will be under SGRY. Since there is a legal guarantee for employment under the NREG Act, more funds will be provided based on actual need.

Jawaharlal Nehru National Urban Renewal Mission : The Jawaharlal Nehru National Urban Renewal Mission launched on 3 December 2005 has been provided a grant of Rs. 4595 crore. Apart from the four projects, including Mumbai metro rail and Bangalore metro rail, the projects under active consideration include projects in Maharashtra, Madhya Pradesh and Gujarat.

Planned urbanisation can act as a spur to growth, employment and better quality of life. The Government will actively promote the establishment of new towns, preferably on a specific industry, for example Information Technology, or a specific theme, for example education or health.

National Social Assistance Programme : Old age pensions are granted under the National Social Assistance Programme (NSAP) to destitute persons above the age of 65 years. Rs 75 per month provided earlier was highly inadequate. The quantum of assistance has been enhanced to Rs 200 per month. Rs 1430 crore has been provided for 2006-2007.

Women and Children : Gender Budgeting Cells have been set up in 32 Ministries and Departments so far.

Scheduled Castes and Scheduled Tribes : Keeping in view the commitment of the Government to the welfare of SCs and STs, the allocations for schemes benefiting only SCs and STs have been enhanced by 14.5 per cent during 2006-07 to Rs 2902 crore as compared to the previous year. Allocations for schemes with at least 20 per cent allocation for SCs and STs have been enhanced by 13.9 per cent to Rs 9690 crore.

The equity contribution to the National SC Finance and Development Corporation has been increased to Rs 37 crore and to the National Safai Karamchari Finance and Development Corporation to Rs 80 crore in 2006-2007.

Twelfth Finance Commission: The Twelfth Finance Commission was constituted by the President on 1 November 2002 to give recommendations on specified aspects of Centre - State fiscal relations during 2005-10. The Commission submitted its Report covering all aspects of its mandate on 17 December 2004.

The Commission has recommended a scheme of fiscal transfers that can serve the objectives of equity and efficiency within a framework of fiscal consolidation. The effort needed to achieve fiscal consolidation should be seen as the joint responsibility of the central and state governments. For achieving vertical and horizontal balance, consistent with the responsibilities of the two levels of governments in respect of providing public and merit goods and services, both the centre and the states need to raise the levels of revenues relative to their respective revenue bases, and exercise restraint in undertaking unwarranted expenditure commitments.

For the period of five years commencing from 1 April 2005, the Commission has recommended that the share of the states in the net proceeds of shareable central taxes shall be 30.5 per cent. For this purpose, additional excise duties in lieu of sales tax are treated as a part of the general pool of central taxes. If the tax rental arrangement is terminated and the states are allowed to levy sales tax (or VAT) on these commodities without any prescribed limit, the share of the states in the net proceeds of shareable central taxes shall be reduced to 29.5 per cent. If any legislation is enacted in respect of service tax after the Eighty-Eighth Constitutional Amendment is notified, it must be ensured that the revenue accruing to a State under the legislation should not be less than the share that would accrue to it, had the entire service tax proceeds been part of the shareable pool.

SOURCES OF REVENUE

The main sources of the Union Tax revenue are customs duties , Union excise duties, service tax, corporate and income taxes. Non-tax revenues largely comprise interest receipts, including interest paid by the Railways, dividend and profits. The main heads of revenue in States are taxes and duties levied by the respective State Governments, share of taxes levied by the Union and grants received from the Union. Property taxes, octroi and terminal taxes are the mainstay of local finance.

TRANSFER OF RESOURCES

Devolution of resources from the Union to the States is a salient feature of the system of federal finance of India. Apart from their share of taxes and duties, State Governments receive statutory and other grants as well as loans for various development and non-development purposes. The total amount of resources directly transferred to the states during 2001-02 onwards and estimates for 2004-05 and 2005-06 are shown in table 13.1. In addition, resources are also transferred by Central Government to the implementing agencies under various schemes without routing it through State budgets.

TABLE 13.1 : RESOURCES TRANSFERRED TO STATES

(Rs in crore)

Period	Taxes and Duties	Grants	Loans (Gross)	Total
2001-02	52,841	41,493	24,154	1,18,488
2002-03	56,122	42,136	27,720	1,25,978
2003-04	65,766	47,320	25,061	1,38,147
2004-2005(BE)	78,617	51,485	27,108	1,57,210
2005-06(RE)	94,959	77,274	1,179	1,73,412

With effect from 1 April 2002, a new system of transferring the entire net collections of small savings to States and Union Territories as loans from the Public Account is in vogue.

ANNUAL BUDGET

An estimate of all anticipated receipts and expenditure of the Union for the ensuing financial year is laid before the Parliament. This is known as 'Annual Financial Statement' or 'Budget' and covers Central Government's transactions of all kinds, in and outside India, occurring during the preceding year, the year in which the Statement is prepared as well as ensuing year or the 'Budget Year' as it is known.

The presentation of Budget is followed by a general discussion on it in both the Houses of Parliament. Estimates of expenditure from the Consolidated Fund of India are placed before the Lok Sabha in the form of 'Demands for Grants'. All withdrawals of money from the Consolidated Fund are thereafter authorised by an Appropriation Act passed by the Parliament every year. Tax proposals of Budget are embodied in a Bill which is passed as the 'Finance Act' of the year. Estimates of receipts and expenditure are similarly presented by the State Governments in their legislatures before the beginning of the financial year and legislative sanction for expenditure is secured through similar procedure. Budgetary position of the Union from 2001-02 onwards is shown in table 13.2.

TABLE 13.2 : BUDGETARY POSITION

(Rs crore)

		2001-02 Actual	2002-03 Actual#	2003-04 Actual#	2004-05 Revised Estimates	2005-06 Budget Estimates
1.	Revenue Receipts	2,01,306	2,30,834	2,63,878	3,00,904	3,51,200
2.	Revenue Expenditure	3,01,468	3,38,713	3,62,140	3,86,068	4,46,513
3.	Revenue Deficit	1,00,162	1,07,879	98,262	85,164	95,313
4.	Capital Receipts	1,62,500	1,80,531	2,07,490	1,83,862 $	1,60,004$
5.	Recoveries of Loans Other Receipts	20,049	37,342*	84,218*	65,656*	12,000
6.	Borrowings and other liabilities	1,42,451	1,43,189	1,23,272	1,18,206	1,48,004
7.	Capital Expenditure	60,842	74,535**	1,09,228**	1,19,723**	67,831
8.	Total Receipts	3,63,806	4,11,365	4,71,368	4,84,766	5,11,204
9.	Total Expenditure	3,62,310	4,13,248	4,71,368	5,05,791	5,14,344

10.	Draw down of cash balance	-1,496	1,883	0	21,025	3,140
11.	Fiscal Deficit [(1+5)-9=6+10]	1,40,955	1,45,072	1,23,272	1,39,231	1,51,144

Note: The figures are exclusive of transfer of States' share in small savings collections.

Based on provisional Actuals for 2002-03 and 2003-04.

* Includes receipts from States on account of debt swap scheme.

** Includes repayment to National Small Savings Fund

$ Does not include Rs 65,481 crore in RE 2004-05 and Rs 80,500 crore in BE 2005-06 in respect of Market Stabilization Scheme, which will remain in the cash balance of the Central Government and will not be used for expenditure.

PUBLIC DEBT

Public debt includes internal debt comprising borrowings inside the country like market loans, compensations and other bonds, treasury bills issued to finance State Governments, commercial banks and other parties as well as non-negotiable non-interest bearing rupees securities issued to the international financial institutions and external debt comprising loans from foreign countries, international financial institutions, etc. Table 13.3 gives an analysis of public debt and "other liabilities" at the end of selected years. The "other liabilities" include outstandings against the various small saving schemes, provident funds, securities issued to Industrial Development Bank of India, Unit Trust of India and nationalised banks, deposits under the special deposit schemes, reserve funds and deposits.

TABLE 13.3 : PUBLIC DEBT AND OTHER LIABILITIES OF GOVERNMENT OF INDIA

(As at the end of March)

(Rs in crore)

	Item	2001-02	2002-03	2003-04 RE	2004-05 BE	2005-06 BE
A	**Public Debt**					
1.	Internal Debt (i to vii)	9,13,061	10,20,689	11,41,706	12,70,272	14,06,525
i	Market Loan	5,16,517	6,19,105	7,07,965	7,58,999	8,70,836
ii	Other (include spl. Bearer Bonds)	61,635	1,14,375	1,93,551	2,77,213	2,98,375
iii	91 Days Treasury Bills	5,047	9,673	7,184	7,184	7,184
iv	Special Securities issued to the RBI in conversion of Treasury Bills	1,01,818	61,818	0	0	0
v	Special floating and other loans	22,551	23,617	22,139	21,388	21,631
vi	Other special securities issued to RBI	3,222	3,596	3,596	1,867	1,868
vii	Securities against small savings	2,02,271	1,88,505	2,02,271	2,03,621	2,06,631
2	External Debt*	71,546	59,612	46,124	54,359	63,215
	Total Public Debt (1+2)	**9,84,607**	**10,80,301**	**11,87,830**	**13,24,631**	**14,69,740**
3	Other Liabilities @	3,81,801	4,78,900	5,48,848	6,56,883	7,62,146
	Total Public Debt and Other Liabilities	**13,66,408**	**15,59,201**	**17,36,678**	**19,81,514**	**22,31,886**

* These represent mainly non-negotiable, no interest bearing securities issued to international financial institutions like International Monetary Fund, International Bank for Reconstruction and Development and Asian Development Bank.

@ Comprises accruals under National Small Savings Fund, Provident Funds, special deposits on Non-Government provident funds and other reserve funds and deposits.

Note: External debt is at book value

RE : Revised Estimates BE : Budget Estimates

NEW INITIATIVES IN FISCAL MANAGEMENT

The persistant fiscal deficit and concomitant growth in the public debt burden have been identified as the most difficult challenges affecting the country's economic growth prospects. To check the potentially damaging impact of fiscal indiscipline on macro-economic parameters, the Parliament had passed the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 which came into force in July 2004. The FRBM Act, inter alia, mandates the Government to eliminate the revenue deficit by 2007-08. Through an amendment in 2004, the target year has been shifted to 2008-09. The FRBM Rules prescribe a minimum annual reduction in the revenue deficit by 0.5 per cent of GDP.

Other obligations of the Government under the FRBM Act, 2003 and FRBM Rules 2004; include (i) To reduce the fiscal deficit by an amount by at least 0.3 per cent of the GDP, so that the deficit is less than three per cent of GDP by the end of 2007-08 (ii) To limit Government guarantees to at most 0.5 per cent of the GDP in any financial year (iii) To limit additional liabilities (including external debt at current exchange rate) to 9 per cent of GDP in 2004-05, 8 per cent of GDP in 2005-06, 7 per cent of GDP in 2006-07, 6 per cent of GDP in 2007-08. (iv) Not to borrow directly from the Reserve Bank of India with effect from 1 April 2006 (v) To present three statements before the Parliament along with the annual budget viz., Macroeconomic Framework Statement, Fiscal Policy Strategy Statement and Medium-term Fiscal Policy Statement. (vi) To move towards greater fiscal transparency and start disclosing specified information such as areas of unrealised revenue, guarantees and asset latest by 2006-07.

The deficit targets envisaged in Budget 2005-06 are as follows:

S.No.	Item	Revised Estimates 2004-05	Budget Estimates 2005-06	Targets for 2006-07	2007-08
1.	Revenue Deficit as percentage of GDP	2.7	2.7@	2.0	1.1
2.	Fiscal Deficit as percentage of GDP	4.5@@	4.3	3.8	3.1
3.	Tax revenue as percentage of GDP	9.8	10.6	11.1	12.6
4.	Total outstanding liabilities as percentage of GDP	68.8	68.6	68.2	67.3

@ The Budget 2005-06 includes a provision of Rs. 5,000 crore as compensation to States on account of shortfall in revenue that may arise due to implementation of State Level Value Added Tax w.e.f. 01.04.2005. But for the inclusion of this estimated expenditure, which the Central Government feels will not be required to be incurred and is being included as measure of assurance to the States, Revenue Deficit would have been 2.6 percent of GDP.

@@ This would have been 4.6 per cent of GDP, had the disinvestment proceeds not have been taken as a resource for financing the Fiscal Deficit.

EXTERNAL ASSISTANCE

The Department of Economic Affairs (DEA) is the nodal department for procuring and coordinating external assistance from multilateral / bilateral agencies. The State Governments and other government agencies who wish to avail themselves of external assistance can forward their proposals to the DEA through the Central sectoral Ministry. The Ministry / Department recommends the proposals / schemes for foreign assistance to the DEA after ensuring the plan priorities, budgetary clearance, administrative clearance, including clearances from Planning Commission at an appropriate stage. In this regard DEA has issued new guidelines for posing, implementation and monitoring of externally aided projects in May 2005.

For all externally aided projects, the loan agreements with the multilateral / bilateral agencies are signed by the DEA (as the nodal department in the Central Government) since this is a subject on the Union list. The DEA is also responsible for all policy issues pertaining to external aid received by Government.

From FY 2005-06, the external assistance received in the form of grants from various multilateral and bilateral agencies is to be passed on to the States on back-to-back basis i.e., on the same terms and conditions on which it is received from the external funding agency.

During 2004-05 the total aid utilisation on Government and Non-Government account stands at Rs 17137.43 crore against Rs 17355.68 crore during 2003-04. As Additional Central Assistance to the States, Rs 8716.69 crore have been released during financial year 2004-05 as against Rs. 9324.36 crore during 2003-04.

Under the new policy announced on 20 September 2004 by DEA, bilateral development assistance will be accepted from all G-8 countries, namely, Japan, United Kingdom, United States of America, Canada, Germany, Italy, France, Russian Federation as well as from the European Commission. Further, such assistance will also be accepted from non G-8 European Union countries providing a minimum bilateral aid package of US $ 25 million per annum to India. A simplified mechanism to process the project proposals of the NGOs, autonomous institutions and universities submitted through bilateral development partners expeditiously has been put in place.

INDO-US BILATERAL RELATIONS

The US development assistance to India started in 1951 and till May 2004, the total assistance to India has been around US $ 14 billion. The assistance mainly comprises of development projects, food commodities and technical assistance. The US assistance is mainly administered through the US agency for International Development (USAID). The assistance extended by USAID at present is entirely in the form of grants.

Initially, the main thrust of US assistance to India was on projects, which were designed to strengthen key institutions and transfer of resources for infrastructure programmes in agriculture and social forestry. Since mid-1980s, the priority has been diversified to include science and technology dimensions focusing specifically on the commercialisation of technology. The current four priority areas of development assistance are: economic growth including financial market reforms and state fiscal reforms, health, environment and energy disaster management. There are 11 ongoing projects supported by USAID in these areas.

INDO-JAPAN BILATERAL RELATIONS

India has received a commitment from Government of Japan for Official Development Assistance (ODA) loan of Yen 134,466 million (Rs. 5600 crore approximately) for FY

2004-05. This is by far the largest ODA loan commitment of Government of Japan to India in a single financial year. This is 19.2 per cent of Japanese global ODA commitments for FY 2004-05. With this, the cumulative ODA loan from Government of Japan has reached Yen 2193.67 billion (Rs. 89406 crore approx. @ Yen 100 = Rs. 40.7) on commitment basis, till 31 March 2005. Notes were exchanged between Government of India and Government of Japan on 29 March 2005 for Japanese ODA loan of Yen 134,466 million (Rs. 5600 crore approximately) for eight projects as per the following details:

Project	Amount in Million Yen
Delhi Mass Rapid Transport System Project (VI)	19,292
North Karanpura Super Thermal Power Project (I)	15,916
Rajasthan Minor Irrigation Improvement Project	11,555
Tamil Nadu Afforestation Project (II)	9,818
Karnataka Sustainable Forest Management and Biodiversity Conservation Project	15,209
Ganga Action Plan Project (Varanasi)	11,184
Bangalore Water Supply and Sewerage Project Phase (II-I)	41,997
Uttar Pradesh Buddhist Circuit Development Project	9,495

The loan agreements for the above projects have also been signed on 31 March 2005.

In order to realise the full potential of their global partnership, the two countries decided on an eight-fold initiative and decided to make their utmost effort to implement this initiative, which comprises of measures for cooperation in eight key areas of interaction, namely: (i) enhanced and upgraded dialogue architecture, including strengthening of the momentum of high-level exchanges, launching of a High Level Strategic Dialogue and full utilisation of the existing dialogue mechanism; (ii) comprehensive economic engagement, through expansion of trade in goods and services, investment flows and other areas of economic cooperation, and exploration of an India-Japan economic partnership agreement; (iii) enhanced security dialogue and cooperation; (iv) science and technology initiative; (v) cultural and academic initiative and strengthening of people-to-people contacts to raise the visibility and profile of one country in the other; (vi) cooperation in ushering a new Asian era; (vii) cooperation in United Nations and other international organisations, including cooperation for the early realisation of U.N. reforms, particularly Security Council reform; and (viii) cooperation in responding to global challenges and opportunities.

The Japanese Grant Aid Programme got resumed with the signing of Exchange of Notes for the project "Improvement of Medical Equipment for Sir JJ Hospital and Cama and Albless Hospitals in Mumbai" on 28 August 2003 for JY 759,000,000. Another Exchange of Notes for JY 2,134,000,000 for the project for "Construction of Diarrheal Research and Control Centre at NICED, Kolkata" was signed on 25 June 2004.

INDIA-UNITED KINGDOM BILATERAL RELATIONS

The United Kingdom has been providing bilateral development assistance to India since 1958. Their assistance to India, which is all in the form of grant, is extended

through the Department for International Development (DFID). UK is currently India's largest bilateral development cooperation partner in terms of grants. In March 1999 it was decided that the grant assistance from UK would be passed on as grants to the recipient states for new projects in the areas of poverty alleviation. DFID's priority States in India are Andhra Pradesh, Madhya Pradesh, Orissa and West Bengal. However, DFID is also providing assistance to other states like UP, Bihar, Chhattisgarh and Maharashtra, etc., through projects implemented by NGOs.

The UK assistance is available in the form of Financial Assistance (routed through GoI budget) and Technical cooperation (TC), which includes direct payment by DIFD for consultancy services, experts, training, etc. In March 2004, DFID launched its new Country Plan in India for 2004-08, entitled "India Country Plan-Partnership for Development". DFID's development cooperation assistance flows to mutually agreed projects in various sectors such as education, slum improvement, health and family welfare, forestry, etc. There are 28 on-going projects under implementation with DFID assistance in this areas that includes Centrally Sponsored Schemes (CSS) such as Sarva Siksha Abhiyan and National AIDS Control Programme (NACP). They will also be involved in another Centrally Sponsored Scheme, i.e., Reproductive and Child Health (RCH)-II.

INDO-EUROPEAN COMMISSION BILATERAL RELATIONS

The European Commission (EC) has been extending assistance to India since 1976. The EC assistance to India is entirely in the form of grant and is currently focused on the areas of environment, public health and education.

A description of the various development co-operation programmes being implemented by the EC in India are as under:

1. **Sarva Shiksha Abhiyan:** Education sector has the largest outlay in EC's development assistance to India. The District Primary Education Programme (DPEP), implemented partly with EC assistance of Euro 150 million, came to an end in December 2002. As an extension of this programme, EC has made a commitment of Euro 200 million to the Sarva Shiksha Abhiyan being implemented by the Government of India for the development of primary education covering 42 districts in the country. First Tranche of Euro 30 million has already been utilised under the programme. Second Tranche of Euro 24 million has been approved by the EC during February, 2005. The other development partners, viz., IDA / World Bank and DFID, UK are also providing assistance of Euro 390 million and Euro 270 million respectively for this programme.
2. **Support to Health and Family Welfare Sector Development:** The EC supported Health and Family Welfare Sector Development Programme, under their Sector Investment Programme (SIP), is being implemented with the aim of reforming the health care system in India focusing primary health care services. The SIP is an integral part of the Government of India's National Family Welfare Programme together with Reproductive and Child Health (RCH) and Safe Motherhood and other schemes. EC's assistance for this project is Euro 240 million.
3. **State Partnership Programme:** EC has now shifted its development co-operation strategy from sector based approach to a partnership approach with one or two Indian States in order to deploy bulk of their resources in these States

for health, education and environment programmes. Accordingly, the States of Chhattisgarh and Rajasthan have been mutually identified by the EC and Government of India for EC's State Partnership Programme, for which EC has committed Euro 160 million.

4. **The European Union (EU)-India Scholarship Programme :** ERASMUS MUNDUS- A Financing Agreement for Euro 33 million has been signed with the EC for EU-India Scholarship Programme which will be utilised to fund around 1,000 scholarships to pursue higher education (masters courses) in various universities of the EU by the Indian students during the period of 2005-09.

INDIA-SWITZERLAND BILATERAL RELATIONS

Swiss assistance has been in the form of grants and has been provided for local costs as well as technical assistance. In the past, Switzerland has also provided mixed credit comprising 40 per cent grant and 60 per cent loan for power sector project.

The Neriyamangalam Hydro Electricity Project of Kerala State Electricity Board (KSEB) has been implemented under the Swiss Mixed Credit Agreement dated 25 June 1991. Presently, Swiss assistance in India is mainly directed towards NGO projects. During the last year Switzerland has supported several NGO projects in India.

INDO-ITALY BILATERAL RELATIONS

Italy has been providing concessional assistance to India since 1981. During the Indo-Italian Cooperation meeting held on 5 June 1996, the Italian side committed 100 billion Italian Lire under this commitment. The following two projects are covered under this commitment:

(i) Credit Line to NSIC : 50 billion Lire of the committed sum of Lire 100 billion was allocated for establishing an open credit line for financing supplies of capital goods and related technical assistance for the development of the Indian Small and Medium Enterprises and was provided to National Small Industries Corporation Ltd. (NSIC). The NSIC signed the Financial Convention for the first tranche of 10 billion Lire on 21 March 2000. Regarding the balance of 40 billion Lira (second tranche), it was decided not to avail of the balance in view of the Government of India's policy prevailing prior to September 2004 not to take any development assistance from smaller bilateral partners, including Italy.

(ii) Water Supply and Solid Waste Management Project in West Bengal: Lire 50 billion is proposed to be used for financing for which DEA has exchanged a Note Verbale on 5 February 2003 with Embassy of Italy. As per revised proposal, the Italian loan for this project would be available at an interest rate of 0.1 per cent per annum with repayment period of 38 years, including a grace period of 17 years.

The Government has since revised the policy on bilateral development assistance. In view of the revised policy of GOI to accept assistance from Italy, NSIC has requested DEA to reconsider the proposal to avail of the balance amount of Lire 40 billion.

INDO-FRANCE BILATERAL RELATIONS

Aid policy with bilateral partners was reviewed. French aid is tied to imports of French goods and services. French commitments are made for specific projects where

contracts are awarded to French companies. Local costs are not financed under French aid.

The policy announcement of 20 September 2004 has included France (by virtue of being a G-8 country) in the list of countries from which development assistance would be acceptable to India. However, while India welcomes development assistance from France, it would still not receive tied aid. It has been clarified to France that it may not be possible for India to accept tied aid; even if it is bundled in a package with an untied component.

INDO-DENMARK BILATERAL RELATIONS

As per Government of India's new policy on external assistance, there will be no further bilateral development cooperation at Government level with Denmark. The Government of Denmark has also decided to phase out its assistance even from the ongoing projects by the end of 2005. The Government of India has concurred with this decision. Consequently, no further disbursements on Indo-Danish projects are foreseen after 31 December 2005. India has re-paid all Danish loans and India has no further debt liabilities in respect of Denmark.

INDO-GERMAN BILATERAL RELATIONS

The Federal Republic of Germany is one of the largest European donor and providing both financial and technical assistance to India since 1958. Financial assistance has been provided mainly as soft loan, composite loan (soft loan combined with commercial loan) as well as grants routed through KfW, German Government's Development Bank. There are 32 Financial Cooperation (FC) and 18 Technical Cooperation (TC) ongoing projects. Total assistance involved in the ongoing FC and TC projects is Euro 987.349 million and Euro 49.98 million respectively. There are 18 FC and 31 TC committed pipeline projects and total assistance involved is Euro 661.23 million and Euro 63.755 million respectively.

The Indo-German Annual Negotiations-2004 was held in July 2004, in which commitment of Euro 123.53 million was made (including Euro 15.53 million from the reprogrammed funds). The following Financing / Loan Agreements have been signed with KfW (Germany) under Indo-German Bilateral Development Cooperation during the year 2004-05:

S.No	Project	Amount in Million Euro
1	Pulse polio programme (5th, 6th and 7th phase)	26.7 (grant)
2	Karnataka Secondary Level Hospital Phase - II	14.3 (grant)
3	Vijayawada Power Project in Andhra Pradesh	281.057

An agreement between Government of Federal Republic of Germany and the Government of India regarding Technical Cooperation was signed in respect of the commitments made by Germans for the year 2004 worth Euro 22.905 million.

BANKING

The first bank of limited liability managed by Indians was Oudh Commercial Bank founded in 1881. Subsequently, Punjab National Bank was established in 1894. Swadeshi movement, which began in 1906, encouraged the formation of a number of commercial banks. Banking crisis during 1913 -1917 and failure of 588 banks in various States during the decade ended 1949 underlined the need for regulating and

controlling commercial banks. The Banking Companies Act was passed in February 1949, which was subsequently amended to read as Banking Regulation Act, 1949. This Act provided the legal framework for regulation of the banking system by RBI.

The largest bank - Imperial Bank of India - was nationalised in 1955 and rechristened as State Bank of India, followed by formation of its 7 Associate Banks in 1959. With a view to bringing commercial banks into the mainstream of economic development with definite social obligations and objectives, the Government issued an ordinance on 19 July 1969 acquiring ownership and control of 14 major banks in the country. Six more commercial banks were nationalised from 15 April 1980.

As certain rigidities and weaknesses were found to have developed in the banking system during the late eighties, the Government of India felt that these had to be addressed to enable the financial system to play its role in ushering in a more efficient and competitive economy. Accordingly, a high-level Committee on the Financial System (CFS) was set up on 14 August 1991 to examine all aspects relating to the structure, organisation, functions and procedures of the financial systems. Based on the recommendations of the Committee (Chairman: Shri M.Narasimham), a comprehensive reform of the banking system was introduced in 1992-93.

A high-level Committee, under the Chairmanship of Shri M.Narasimham was constituted by the Government of India in December 1997 to review the record of implementation of financial system reforms recommended in 1991 by the Committee on Financial System and chart the reforms necessary in the years ahead. The Committee submitted its report to the Government in April 1998. Some of the recommendations of the Committee, on prudential accounting norms, particularly in the areas of Capital Adequacy Ratio, classification of government guaranteed advances, provisioning requirements on standard advances and more disclosures in the Balance Sheets of banks were accepted and implemented. Recent major initiatives undertaken for strengthening the financial sector in pursuance to the recommendations of the above Committee relate to guidelines to banks on Asset-Liability Management and integrated risk management systems, compliance with Accounting Standards, consolidated accounting and supervision, fine-tuning of prudential norms for income recognition, asset classification and provisioning for NPAs, etc. The guidelines on setting-up of Off-shore Banking Units in Special Economic Zones, Fair Practices Code for Lenders, Corporate Governance, Anti-Money Laundering measures, etc., are other important developments in the banking sector. The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 is expected to facilitate NPA management by banks more effectively.

In 1993, in recognition of the need to introduce greater competition, new private sector banks were allowed to be set up in the banking system. These new banks had to satisfy certain requirements. Further, revised guidelines for entry of new banks in private sector were issued on 3 January 2001.

The applications for setting up new banks received within the stipulated period were scrutinised by RBI and “in principle” approvals were issued to two entities on 7 February 2002. Kotak Mahindra Bank Ltd, on satisfactory completion of other formalities, was granted banking licence on 6 February 2003. It commenced operations from 22 March 2003 and subsequently was included in the Second Schedule of the Reserve Bank of India Act, 1934 w.e.f 12 April 2003.

On satisfactory completion of all formalities, a licence was granted to "Yes Bank Ltd" on 24 May 2004. The bank commenced its operations from 16 August 2004 and was included in the second Schedule of the RBI Act, 1934 on 21 August 2004.

A draft comprehensive policy framework for ownership and governance in private sector banks was put in the public domain on 2 July 2004 for discussion and feedback. After taking into consideration the feedback received from all concerned and in consultation with Government of India, RBI issued detailed Guidelines on ownership and governance in private sector banks on 28 February 2005. The underlying principles of the guidelines inter alia are to ensure that the all banks in the private sector have a networth of Rs.300 crore, ultimate ownership and control of private sector banks is well diversified, important shareholders (i.e., shareholding of 5 per cent and above) are 'fit and proper' as laid down in the guidelines dated 3 February 2004 and the directors and the CEO who manage the affairs of the bank are 'fit and proper' as laid down in the circular dated 25 June 2004. The guidelines also provide for restrictions on cross holding of 5 per cent or above by one bank / FI in another bank / FI as laid down in the circular dated 6 July 2004 and observance of sound corporate governance principles. The RBI held discussions with banks to review the position.

RESERVE BANK OF INDIA

The Reserve Bank of India (RBI) was established under the Reserve Bank of India Act, 1934 on 1 April 1935 and nationalised on 1 January 1949. The Bank is the sole authority for issue of currency in India other than one-rupee coins and subsidiary coins. As the agent of the Central Government, the Reserve Bank undertakes distribution of one-rupee coin as well as small coins issued by the Government. The Bank acts as banker to the Central Government, and State Governments by virtue of agreements entered into with them. The Reserve Bank also handles the borrowing programme of the Central and State Governments. It formulates and administers monetary policy with a view to ensuring price stability while promoting higher production in the real sector through proper deployment of credit. The RBI plays an important role in maintaining orderly conditions in the foreign exchange market and acts as an agent of the Government in respect of India's membership of International Monetary Fund. The Reserve Bank also performs a variety of developmental and promotional functions. The Reserve bank also regulates and supervises commercial banking system, urban co-operative banks and non-banking financial sector.

COMPOSITION OF BANKING SYSTEM

Commercial Banking System in India consisted of 218 scheduled commercial banks (including foreign banks) as on 31 March 2006. Of the scheduled commercial banks, 161 are in public sector of which 133 are regional rural banks (RRBs) and these account for about 75.2 per cent of the deposits of all scheduled commercial banks. The regional rural banks were specially set up to increase the flow of credit to small borrowers in the rural areas. The remaining 28 banks, other than RRBs, in the public sector consist of 19 nationalised banks, 8 banks in SBI group and IDBI Ltd. and transact all types of commercial banking business. Some important indicators in regard to progress of commercial banking in India since 1999 are given in Table 13.4.

Amongst the public sector banks, as on 31 March 2006, the nationalised banks (including IDBI Ltd.) group is the biggest unit with 33,868 offices, deposits aggregating Rs 10,13,664 crore and advances of Rs 7,21,066 crore. The State Bank of India group (SBI and its seven Associates) with 13,820 offices, deposit aggregating Rs 4,90,375

crore and advances Rs 3,50,961 crore is the second largest. The nationalised banks accounts for 67.3 per cent of aggregate banking business (aggregate of deposits and advances) conducted by the public sector banks (excluding RRBs) and 48.0 per cent of the aggregate business of all scheduled commercial banks. The SBI and its associates as a group accounts for 32.7 per cent of aggregate banking business conducted by the public sector banks (excluding RRBs) and 23.3 per cent of the aggregate business of all scheduled commercial banks (Source: Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks – March 2006).

DEPOSIT MOBILISATION AND DEPLOYMENT

There has been a substantial increase in the deposits of scheduled commercial banks in the post-nationalisation period. At the end of June 1969, deposits of these banks aggregated to only Rs.4,646 crore. As on 31 March 2006, this amount has increased to Rs 20,93,042 crore. Deposit amount with public sector banks was Rs 3,871 crore in June 1969. As on 31 March 2006, this amount stood at Rs 15,74,664 crore (Source: Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks – March 2006).

Deposits mobilised by the banks are utilised for: (i) loans and advances; (ii) investments in government and other approved securities in fulfillment of the liquidity stipulations; and (iii) investment in commercial paper, shares, debentures, etc., up to a stipulated ceiling. There has been a significant increase in the investments of banks in government and other approved securities from Rs.1,361 crore in June 1969 to Rs.7,17,454 crore (provisional) as at the end of March 2006. The Bank Credit of scheduled commercial banks have grown from Rs.3,599 crore in June 1969 to Rs.15,07,077 crore as at the end of March 2006 (source: Reserve Bank of India Bulletin – August 2006).

TABLE 13.4 : PROGRESS OF COMMERCIAL BANKING IN INDIA

S. No.	Item	March 1999	March 2000	March 2001	March 2002	March 2003	March 2004	March 2005
1.	Number of Commercial Banks	303	297	301	298	294	291	288
	(a) Scheduled Commercial Banks	302	297	296	294	289	286	284
	of which : Regional Rural Banks	196	196	196	196	196	196	196
	(b) Non-Scheduled Commercial Banks	1	-	5	4	5	5	4
2.	Number of Bank Offices in India^	64,939	65,412	65,919	66,190	66,535	67,188	68355
3.	Population per office (in thousands)	15	15	15	16	16	16	16
4.	Deposits of Scheduled Commercial Banks in India (Rs crore)	7,14,025@	8,51,593@	9,89,141#	11,31,187#	13,11,761#	15,42,284&	1732858&
5.	Credit of Scheduled Commercial Banks in India (Rs crore)	3,68,837	4,54,069	5,29,272	6,09,053	7,46,432	8,65,594	1124300
6.	Per Capita Deposits of Scheduled Commercial Banks (Rs)	7,237	8,498	9,758	10,994	12,554	14,550	16091
7.	Per Capita Credit of Scheduled Commercial Banks (Rs)	3,738	4,531	5,221	5,919	7,143	8,166	10440
8.	Deposits of Scheduled	49.8	53.5	58.9	60.7	65.3	68.5	68.3

Commercial Banks as percentage of National Income (at current prices)

@ Includes Resurgent India Bonds (RIB) (Rs 17,945 crore)

Includes Resurgent India Bonds (RIB) (Rs 17,945 crore) and also India Millennium Deposits (IMD) (Rs 25,662 crore)

& Includes India Millennium Deposits (IMD) (Rs 25,662 Crore)

^ Excludes Administrative Offices

Source : Basic Statistical Returns of Scheduled Commercial Banks in India, Volume-34, (March 2005)

ADVANCES TO PRIORITY SECTOR

Extension of credit to small borrowers in the hitherto neglected sectors of the economy has been one of the key tasks assigned to the public sector banks in the post-nationalisation period. To achieve this objective, banks have drawn up schemes to extend credit to small borrowers in sectors such as agriculture, small-scale industry, road and water transport, retail trade and small business which traditionally had very little share in the credit extended by banks. To improve and enhance the flow of credit to the priority sector including agriculture and small-scale industries sectors, the following policy initiatives were taken:

- It was decided to treat investments made by banks in mortgage backed securities (MBS) as direct lending to housing within the priority sector lending subject to certain conditions;
- Investments made by banks on or after 1 April 2005 in the special bonds issued by certain specified institutions would not be eligible for classification under priority sector lending and such investments which have already been made / to be made by banks up to 31 March 2005 would cease to be eligible for classification under priority sector lending in a phased manner;
- Investment limit in plant and machinery for seven items belonging to sports goods, which figure in the list of items reserved for manufacture in the Small-Scale Industries (SSI) Sector, has been enhanced from Rs 1 crore to Rs. 5 crore for purpose of classification under priority sector advances;
- Advances granted by banks to farmers, through the produce marketing schemes under priority sector lending, against pledge / hypothecation of agricultural produce including warehouse receipts for a period not exceeding 12 months was increased from Rs 5 lakh to Rs 10 lakh;
- Investments made by banks on or after 1 July 2005 in venture capital shall not be eligible for classification under priority sector lending while such investments already made up to 30 June 2005 would not be eligible for classification under priority sector lending with effect from 1 April 2006;
- Fifty per cent of the credit outstanding under loans for general purposes under General Credit Cards (GCC) would be eligible for classification as indirect finance to agriculture within the priority sector; and
- Loans to power distribution corporations / companies, emerging out of bifurcation / restructuring of State Electricity Boards (SEBs), for reimbursing the expenditure already incurred by them for providing low tension connection from step-down point to individual farmers for energising their wells, may also be classified as indirect finance to agriculture.

Amount outstanding under priority sector lending by public sector banks during the period June 1969 to March 2006 increased from Rs 441 crore to Rs 4,10,379 crore and accounted for 40.3 per cent of net bank credit as on the last reporting Friday of March 2006.

CREDIT FLOW TO WEAKER SECTIONS

With a view to augmenting credit flow to small and poor borrowers, commercial banks were advised by the Reserve Bank of India to provide at least 10 per cent of their net bank credit or 25 per cent of their priority sector advances to weaker sections comprising small and marginal farmers, landless labourers, tenant farmers and share croppers, artisans, village and cottage industries where individual credit limits do not exceed Rs. 50000, beneficiaries of Government sponsored schemes such as the Swarnjayanti Gram Swarozgar Yojana (SGSY) for rural poverty, Swarna Jayanti Shahari Rozgar Yojana (SJSRY) and the Scheme of Liberation and Rehabilitation of Scavengers (SLRS), beneficiaries of the Differential Rate of Interest (DRI) scheme and scheduled castes and scheduled tribes. With a view to bringing in urban poor into formal financial system, banks have been advised to grant loans to distressed urban poor to prepay their debt to non-institutional lenders, against appropriate collateral or group security, subject to the guidelines to be approved by their Boards of Directors. Such loans to urban poor may be classified under weaker sections within the priority sector. As on the last reporting Friday of March 2006, the amount of outstanding advances extended by public sector banks to the weaker sections under the priority sector amounted to Rs 78,374 crore and accounted for 7.7 per cent of their net bank credit.

CREDIT FLOW TO AGRICULTURE

Banks were initially given a target of extending 15 per cent of the total advances as direct finance to the agriculture sector to be achieved by March 1985. This target was subsequently raised to 18 per cent to be achieved by March 1990. In terms of the guidelines issued by Reserve Bank of India in October 1993, both direct and indirect advances for agriculture are taken together for assessing the target of 18 per cent, with the condition that for the purpose of computing their performance in lending to agriculture, lendings for indirect agriculture should not exceed one fourth of the total agriculture lending target of 18 per cent of net bank credit so as to ensure that the focus of banks on direct lending to agriculture is not diluted. However, all agricultural advances under the categories ‘direct’ and ‘indirect’ will be reckoned in computing performance under the overall priority sector target of 40 per cent of the net bank credit. As at the end of March 2006, public sector banks had extended Rs 1,54,900 crore, constituting 15.22 per cent of the net bank credit, to the agriculture sector. Private sector banks extended Rs. 36,185 crore to agriculture as at the end of March 2006 constituting 13.5 per cent of net bank credit.

ADVANCES TO SC / ST BORROWERS

People belonging to the scheduled castes and scheduled tribes have been recognised as the most vulnerable sections. Banks have been asked to make special efforts to assist them with adequate credit to enable them to undertake self-employment ventures to acquire income generating capital assets so as to improve their standard of living. At the end of March 2006, the total outstanding loan extended to scheduled castes / scheduled tribes by public sector banks under priority sector lending was Rs 22,666 crore in 84.38 lakh borrowal accounts.

DIFFERENTIAL RATE OF INTEREST SCHEME

Under the Differential Rate of Interest (DRI) Scheme, introduced in 1972, public sector banks are required to fulfil the target of lending of at least one per cent of the total advances as at the end of the preceding year to the weakest of the weak sections of the society at an interest rate of four per cent per annum. The scheme covers poor borrowers having an annual family income of not more than Rs. 6,400 in rural areas and Rs. 7,200 in other areas and not having more than 2.5 acres of unirrigated or one acre of irrigated land. They are given credit support of Rs. 6,500 as term loan and working capital loan for productive ventures. The public sector banks had an outstanding of DRI credit amounting to Rs 490 crore as at the end of March 2006.

SWARNJAYANTI GRAM SWAROZGAR YOJANA (SGSY)

The Union Ministry of Rural Development launched a restructured poverty alleviation programme, Swarnjayanti Gram Swarozgar Yojana (SGSY) with effect from 1 April 1999, which has replaced IRDP and its allied schemes viz., Training Of Rural Youth For Self Employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA), Supply Of Improved Toolkits to Rural Artisans (SITRA), Ganga Kalyan Yojana (GKY) and Million Wells Scheme (MWS).

The scheme aims at establishing a large number of micro enterprises in the rural areas of the country. The objective of the Scheme is to bring every assisted family above the poverty line in three years by providing them income generating assets through a mix of bank credit and government subsidy. The monthly income from the activity to be undertaken should not be less than Rs.2000, net of repayment to the bank, at least in the third year.

The SGSY is a holistic programme covering all the aspects of self employment such as organisation of poor into Self Help Groups, training, credit, technology, infrastructure and marketing. The scheme is funded on 75:25 basis by centre and states and is implemented by DRDAs through Panchayat Samities. Major share of assistance is for 4-5 key activities identified at the block level.

The year 2005-06 was the seventh year of implementation of the scheme. A total number of 12,07,078 swarozgaris received bank credit amounting to Rs 1125.42 crore (and Government subsidy amounting to Rs 375.09 crore) under the Swarna Jayanti Gram Swarozgar Yojana (SGSY) during the year 2005-06. Of the Swarozgaris assisted, 4,26,000 (35.29 per cent) were Scheduled Castes and Scheduled Tribes (SC / ST), 608756 (50.43 per cent) were women and 20788 (1.72 per cent) were physically handicapped.

SWARNA JAYANTI SHAHARI ROZGAR YOJANA

The Swarnajayanti Shahari Rozgar Yojana (SJSRY) is in operation from 1 December 1997 in all urban and semi-urban towns of India. Among other components, the scheme has two sub-schemes where bank credit is involved, namely, Urban Self Employment Programme (USEP) and Development of Women and Children in Urban Areas (DWCUA). The beneficiaries under the scheme are identified by the urban local bodies on the basis of house-to-house survey. Under the scheme, women are to be assisted to the extent of not less than 30 per cent, disabled at 3 per cent and SC / STs at least to the extent of the proportion of their strength in the local population. The scheme is funded on a 75:25 basis between the Central and the State Governments.

During the year 2005-06, disbursements amounting to Rs 183.61 crore were made in 55,023 cases (out of 68579 applications sanctioned). Of the above, Rs 49.68

crore were disbursed to 14,674 SC / STs, Rs 100.25 crore were disbursed to 12,494 women and Rs 4.12 crore were disbursed to 919 disabled persons during the year 2005-06.

PRIME MINISTER'S ROZGAR YOJANA (PMRY)

The scheme was launched on 2 October 1993 and initially was in operation in urban areas. From 1 April 1994 onwards the scheme is being implemented throughout the country. The objective of the scheme is to provide self–employment opportunities to educated unemployed youth in the age group of 18 to 35 years. In North-Eastern states the eligible age group is from 18-40. There is a 10-year relaxation for SC / ST, ex-servicemen / physically handicapped and women, in the upper age limit. To be eligible for assistance under the scheme the family income of the beneficiaries shall not exceed Rs. 40000 per annum and income of parents of the beneficiaries also shall not exceed Rs. 40000. The banks have been allowed to make parents / Head of the family of unmarried girl as co-borrower, with effect from 21 November, 2002. The borrower should be the resident of the area for more than 3 years. He should have passed at least eighth standard. It has also been provided that the margin money and subsidy amount would be 20 per cent of the project cost. Ceiling on subsidy amount will be Rs 7500 in States / UTs other than in the North Eastern Region. In the seven states in North East the ceiling on subsidy amount payable will be Rs 15000. This has been extended to Sikkim, Himachal Pradesh, Jammu and Kashmir and Uttaranchal. Hence the margin to be brought in by the borrower will vary from 5 per cent to 16.25 per cent of the project cost. All economically viable activities including agricultural and allied activities but excluding direct agricultural operations like raising of crops / purchase of manure etc. are now being covered under the scheme. Projects up to Rs.1 lakh in business sector and up to Rs 2 lakh in other sectors will be eligible for finance by banks. In case of partnership firm projects up to Rs 10 lakh can be undertaken and loan amount will be to the extent of individual admissibility. Residency criteria for married men in Meghalaya has been relaxed in line with the married women in the rest of the country with effect from 11 August 2003.

SHGs are considered eligible for financing under the Prime Minister's Rozgar Yojana (PMRY), effective from 8 December 2003 (terms modified on 30 July 2004) provided all members individually satisfy the eligibility criteria laid down and total membership does not exceed twenty. There is also a ceiling on the loan amount. During 2004-05 banks sanctioned loans amounting to Rs 1923 crore in 2.98 lakh accounts, while disbursements amounted to Rs 1542 crore in 2.48 lakh accounts (data provisional). Further during 2005-06 banks sanctioned loans amounting to Rs 1987 crore in 3.10 lakh accounts, while disbursements amounted to Rs 1521 crore in 2.49 lakh accounts.

HOUSING FINANCE

The current focus of RBI's regulation with regard to Housing Finance is to ensure orderly growth of housing loan portfolio of banks.

(i) Risk Weight on Housing Finance : Taking into account rapid expansion in credit to housing sector, banks extending housing loans to individuals against the mortgage of residential housing properties were required to assign risk weight of 75 per cent on such loans, which are fully secured by mortgage of residential properties and investments in Mortgage Backed Securities (MBS) of Housing Finance Companies (HFCs), recognised and supervised by NHB. The risk weight for commercial real

estate exposure has been raised to 125 per cent on 26 July 2005 and further to 150 per cent on 25 May 2006.

(ii) Adherence to National Building Code : In view of the importance of safety of buildings especially against natural disasters banks were advised to adhere to the National Building Code (NBC) formulated by the Bureau of Indian Standards (BIS).

REGIONAL RURAL BANKS

Regional Rural Banks were set up to take banking services to the doorsteps of rural masses especially in remote rural areas with no access to banking services. These banks were originally intended to provide institutional credit to the weaker sections of the society called 'target groups'. The Regional Rural Banks (RRBs) are conceived as institutions that combine the local feel and familiarity with rural problems, which the co-operatives possess, and the degree of business organisation as well as the ability to mobilise deposits, which the commercial banks possess. The banks were also intended to mobilise and channelise rural savings for supporting productive activities in the rural areas. However, with effect from April 1997, the concept of priority sector lending was made applicable to RRBs. The interest rates on term deposits offered and interest rates on loans charged by RRBs have also been freed.

The credit outstanding of all the 196 RRBs stood at Rs 32,870 crore as at the end of March 2005 and Rs 62,143 crore were mobilized as deposits by RRBs till that date. RRBs which comply with certain prescribed conditions are also permitted to open and maintain non-resident accounts in Rupees.

With a view to consolidating and strengthening RRBs, the Government of India initiated, in September 2005, the process of amalgamation of RRBs, in a phased manner. Till 31 August 2006, 134 RRBS have been amalgamated to form 42 new RRBS, sponsored by 18 banks in 16 states, bringing down the total number of RRBs to 104 from 196. The amalgamation process is still continuing.

SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA

The Small Industries Development Bank of India (SIDBI) was established as a principal financial institution for the promotion, financing and development of industries in the small scale sector. SIDBI started its operations from 2 April 1990 and is engaged in providing assistance to the small-scale industrial sector in the country through other institutions like State Financial Corporations, Commercial Banks and State Industrial Development Corporations. The Financial assistance sanctioned and disbursed aggregated to Rs 11975 crore and Rs 9100 crore, respectively, during 2005-06. Net profit after tax stood Rs 270 crore during 2005-06.

EXPORT-IMPORT BANK OF INDIA

The Export Import Bank of India (EXIM Bank) was established for financing, facilitating and promoting foreign trade in India. During the year ended 31 March 2006, EXIM Bank sanctioned loans of Rs 20489 crore while disbursements amounted to Rs 15039 crore. Profit (after tax) of the Bank for the period 2005-06 amounted to Rs 271 crore.

NATIONAL HOUSING BANK

The National Housing Bank (NHB), the apex institution of housing finance in India, was set up as wholly owned subsidiary of the Reserve Bank of India. The bank started its operations from July 1988. The authorised paid-up capital of NHB stood at

Rs 450 crore and the reserves and surplus were Rs 1201.32 crore as on 30 June 2005. The profit after tax stood at Rs 44 crore during 2004-05.

The NHB is the regulator and supervisor of Housing Finance Companies (HFCs) in the country. Total refinance extended by NHB to all housing finance institutions including Housing Finance Companies, commercial banks and co-operative sector institutions stood at Rs 7500 crore as on 30 June 2005.

The bank monitors the performance of the Golden Jubilee Rural Housing Finance Scheme being implemented through Scheduled Banks, HFCs and Co-operative Sector Institutions. Against a target of 2.5 lakh dwelling units for the year 2004-05, 2.58 lakh units had been financed. For the Year 2005-06, target of financing 2.75 lakh units has been set by Government of India.

NABARD

The National Bank for Agriculture and Rural Development (NABARD) came into existence on 12 July 1982. It was established for providing credit for promotion of agriculture, small-scale industries, cottage and village industries, handicrafts and other allied economic activities in rural areas with a view to promoting integrated rural development and securing prosperity of rural areas. Paid-up capital of Nabard is stood at 2000 crore as on 31 March, 2006. The profit after tax stood at Rs 857 crore during year 2005-2006.

INDIAN BANKS ABROAD

As on 30 June 2006, eighteen Indian banks- twelve from the public sector and six from the private sector- had operations overseas, which had their presence in 47 countries with a network of 111 branches (including offshore units), 6 joint ventures, 18 subsidiaries and 34 representative offices. Bank of Baroda had highest concentration, with 39 branches, 7 subsidiaries, one joint venture bank and 3 representative offices in 20 countries, followed by State Bank of India with 30 branches, five subsidiaries, three joint venture banks and seven representative offices in 29 countries and Bank of India with 20 branches, one subsidiary, two joint venture banks and three representative offices in 14 countries.

INTERNATIONAL MONETARY FUND

As part of its mandate for international surveillance under the Article of Agreement, the IMF conducts what is known as Article IV consultations to review the economic status of the member countries, normally, once a year. Article IV consultations are generally held in two phases. During this exercise the IMF mission holds discussions with RBI and various ministries / departments of Central Government. The Article IV consultations are concluded with a meeting of IMF Executive Board at Washington D.C. which discusses the Report. The first phase of 2004 Article IV consultations was held in November 2003. After that another visit was made by the IMF Mission to India in March 2004 for making some interim assessment about the macro-economic and monetary development situation for the purpose of World Economic Outlook Report. Second phase of 2004 Article IV consultations concluded in October 2004.

Special Data Dissemination Standards (SDDS) : The SDDS indicates norms relating to coverage timeliness and periodicity of data, access to public and integrity and quality of data. The Statistics Department of the IMF linked India’s National Summary Data Page to the Dissemination Standard Bulletin Board (DSBB) on 7 July 2003, facilitating international investors and analysts getting information on India.

INDIA AND THE INTERNATIONAL MONETARY FUND (IMF)

Introduction : India is a founder member of the International Monetary Fund. Finance Minister is the ex-officio Governor on the Board of Governors of the IMF and Governor, RBI is India's Alternate Governor. India is represented at the IMF by an Executive Director (currently Shri B.P. Misra), who also represents three other countries, viz. Bangladesh, Sri Lanka and Bhutan.

Quota : India's current quota in the IMF is SDR (Special Drawing Rights) 4,158.20 million in the total quota of SDR 213 billion, giving it a share holding of 1.95 per cent. However, based on voting share, India (together with its constituency countries viz. Bangladesh, Bhutan and Sri Lanka) is ranked 21st in the list of 24 constituency.

Surveillance : As of its mandate for international surveillance under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members. Usually every year, to review the economic status of the member countries. During Article IV consultations exercise the IMF mission holds discussions with the RBI and various line Ministries / Departments of the Central Government. The Article IV Consultations are concluded with a meeting of IMF Executive Board at Washington DC which discusses the Report. For the year 2005, a mid-term review was undertaken in March 2005. Latest round of Article IV Consultations took place in October 2005. The IMF staff completed a report on 22 December 2005. Staff report on India is discussed at the IMF Executive Board in February 2006 and the report was published accordingly.

Financial Transaction Plan (FTP) : India participates in the FTP of the IMF from 2002. Forty-three countries, including India, now participate in FTP. By participation in FTP, India is allowing IMF to encash its rupee holdings as part of our quota contribution, for hard currency which is then lent to other member countries who are debtors to the IMF. From 2002 to February 2006, India has made purchases transactions of SDRs 493.230 million and four repurchase transactions amounting to SDRs 466.474 million.

India-IMF Institute : In July 2004, India and IMF joint training programme at the national Institute of Bank Management, Pune was established. The Training Programme will provide policy oriented training in economics and related operational fields to Indian officials and officials of countries in South Asia and East Africa. The first training programme was held during July 2006. The RBI is the nodal body to coordinate the training programme with the IMF.

Poverty Reduction Growth Facility : Enhanced Structural Adjustment Facility (ESAF) was established in 1987 with an amount of SDR 6 billion to help the low income countries with heavy debt burdens in difficult external environment to implement comprehensive macro-economic and structural policy programmes aiming at strengthening their balance of payments position and fostering growth. India contributes as donations to Subsidy Account and made a commitment to provide grant contributes to the extent of US $ 1 million per year over 15 year for a total of US $ 15 million. India has paid thirteenth annual installment to the PRGF Trust Subsidy Account amounting to US $ 1 million (equivalent to Rs 4,66,70,000) during July 2006.

WORLD BANK LENDING TO INDIA

India has been borrowing from the World Bank through International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA) for various development projects in the areas of poverty alleviation,

infrastructure, rural development, etc. IDA funds are one of the most concessional external loans for Government of India (GOI) and are used largely in social sector projects that contribute to the achievement of Millennium Development Goals (MDGs). IBRD funds are relatively costlier but cheaper than commercial external borrowings. The GOI utilises IBRD loans primarily for infrastructure projects. However, sometimes a blend of IDA credits and IBRD loans is also used. India has borrowed around US$ 65.8 billion from the World Bank so far.

Terms and Conditions of World Bank Lending

IBRD Loans

Repayment period	20 years including a grace period of 5 years
Interest	LIBOR + variable spread
Commitment charges undisbursed amount	0.75 per cent
Front End fee	1 per cent
Total Cost	LIBOR + 40 Basis points (approx.)

IDA Credits

Repayment period	35 years including a grace period of 10 years
Interest	Nil
Service Charges	0.75 per cent
Commitment Charges on undisbursed amount	0.5 per cent

International Fund for Agricultural Development (IFAD) : India is one of the original members of IFAD the Government of India had committed to contribute US$ 15 million (3 equal installments of 5 million each) towards the 6th Replenishment of IFAD resources, which has already been paid. The Government of India has committed to contribute US$ 17 million towards the 7th Replenishment of IFAD resources. The total amount of US$17 million will be deposited in three installments of US$ 5 million for financial year 2006-07 and US$ 6 million for financial year 2007-08 and 2008-09.

The IFAD has assisted in 19 projects in the agriculture and Rural Development Sector with the commitment of US$ 479.78 million. Out of these, 12 projects have already been closed.

ASIAN DEVELOPMENT BANK

The Asian Development Bank (ADB), an international Partnership of 63 member countries, was established in 1966 with its headquarters at Manila, Philippines. India is a founder member. The Bank is engaged in promoting economic and social progress of its developing member countries in the Asia and the Pacific region. Its principal functions are as follows: (i) to make loans and equity investments for the economic and social advancement of its developing member countries; (ii) to provide technical assistance for the preparation and execution of development projects and programs and advisory services; (iii) to respond to the requests for assistance in coordinating development policies and plans in developing member countries; and (iv) respond to the requests for assistance coordinating development policies and plans of developing member countries.

India's subscription to the Bank's capital stock as on 31 December 2004 is 6.424 per cent of all the member countries.

India started borrowing from ADB's Ordinary Capital Resources(OCR) in 1986. During calendar year 2004, ADB Board approved loans of US $ 1200 million for five loans to India, namely :

	Name of the Project	Amount US $ million
1.	Power Transmission (Sector) Project	400.00
2.	National Highways Corridor Sector II Project	400.00
3.	Assam Governance and Public Resource Management Sector Development Programme	125.00
4.	Assam Governance and Public Resource Management Sector Development Project	25.00
5.	Multisector Project for Infrastructure Rehabilitation in Jammu and Kashmir	250.00
	TOTAL	**1200.00**

The Bank's lending has been mainly in the Energy, Transport and Communications, Finance, Industry and Social Infrastructure sectors. As of 31 December 2004, the Bank had cumulatively approved 83 Public Sector loans to India amounting to US$ 14.111 billion. With 52 loans closed, the active portfolio comprises 31 loans. Cumulative disbursements till 31 December 2004 were about US$ 7.304 billion.

India has contributed US $ 2.91 million in convertible currency (upto the end of 2004) to the Technical Assistance Special Fund (TASF) of the ADB.

The Bank has extended technical assistance to India in addition to loans from its OCR window. The Bank's technical assistance support was US$ 0.6 m in 1988. To end 2004, India has received a cumulative amount of US $ 108.96 million. The technical assistance provided include support for institutional strengthening, effective project implementation and policy reforms as well as for project preparation.

India holds the position of Executive Director on the Board of Directors of the Bank - its Constituency comprises India, Bangladesh, Bhutan, Lao PDR and Tajikistan. The Finance Minister is India's Governor on the Board of Governors of Asian Development Bank and Secretary (EA) is the Alternate Governor.

FOREIGN INVESTMENT PROMOTION BOARD

The Foreign Investment Promotion Board (FIPB) has been reconstituted on 18 February 2003 and transferred to the Department of Economic Affairs (DEA), Ministry of Finance with the following administrative arrangements.

The Foreign Investment Promotion Board (FIPB) comprises the following Core Group of Secretaries to the Government: (i) Secretary to Government, Department of Economic Affairs, Ministry of Finance– Chairman. (ii) Secretary to Government, Department of Industrial Policy and Promotion, Ministry of commerce and Industry. (iii) Secretary to Government, Department of Commerce, Ministry of Commerce and Industry. (iv) Secretary to Government, Economic Relations, Ministry of External Affairs. (v) Secretary to Government, Ministry of Overseas Indian Affairs (being included).

The Board would be able to co-opt other Secretaries to the Government of India and top officials of financial institutions, banks and professional experts of industry and commerce, as and when necessary. In the present constitution, Secretary, Department of Revenue and Secretary, Department of SSI are the co-opted permanent members of the Board.

The FIPB in Department of Economic Affairs (DEA) is the Secretariat for executing the policy of the Government on Foreign Direct Investment (FDI). All proposals (complete in all respects) received in FIPB Secretariat are considered by the Board and the decision of the Government is conveyed in the prescribed time limit of 30 days.

FOREIGN DIRECT INVESTMENT

The Government of India has recently undertaken a comprehensive review of the FDI policy and associated procedures. As a result, a number of rationalisation measures have been undertaken which, inter alia include, dispensing with the need of multiple approvals from Government and / or regulatory agencies that exist in certain sectors, extending the automatic route to more sectors, and allowing FDI in new sectors.

As per the extant policy, FDI up to 100 per cent is allowed, under the automatic route, in most sectors / activities. FDI under the automate route does not require prior approval either by the Government of India or the Reserve Bank of India (RBI). Investors are only required to notify the concerned Regional office of RBI within 30 days of receipt of inward remittances and file required documents with that office within 30 days of issue of shares to foreign investors.

Under the Government approval route, applications for FDI proposals, other than by Non-Resident Indians, and proposals for FDI in 'Single Brand' product retailing, are received in the Department of Economic Affairs, M / o Finance. Proposals for FDI in 'Single Brand' product retailing and the NRI's are received in the Department of Industrial Policy and Promotion, M / o Commerce and Industry.

Foreign Investments in equity capital of an Indian company under the Portfolio Investment Scheme are not within the ambit of FDI policy and are governed by separate regulations of RBI / Securities and Exchange Board of India (SEBI).

At present, FDI is prohibited for the following sectors : (i) Retail trading (except Single Brand Product retailing), (ii) Atomic energy, (iii) Lottery business, (iv) cambling and Betting.

All Activities / Sectors would require period Government approval for FDI in the following circumstances: (i) where provisions of Press Note (2005 Series) are attraced; (ii) where more than 24 per cent foreign equity is proposed to be inducted for manufacture of items reserved for the Small Scale Sector.

FDI is permitted up to 100 per cent on the automatic route in most sectors subject to serctoral rules / regulations applicable.

Rationalisation of the FDI Policy

The extent FDI policy stipulates as under :

a. To allow under the automatic route, FDI up to 100 per cent.

    i. distillation & brewing of potable alcohol;

    ii. manufacture of industrial explosives;

    iii. manufacture of hazardous chemicals;

iv. manufacturing activities located within 25 km of the Standard Urban Area limits which require Industrial license under the Industries (Development & Regulation) Act, 1951;

v. setting up Greenfield airport projects;

vi. laying of Natural Gas / LNG pipelines, market study & formulation and Investment financing in the Petroleum & Natural Gas sector; and

vii. cash & carry wholesale trading and export trading.

b. To increase FDI caps to 100 per cent and permit it under the automatic route for:

i. coal & liginite mining for captive consumption;

ii. setting up infrastructure relating to marketing in Petroleum & Natural Gas sector; and exploration and mining of diamonds & precious stones.

c. To allow FDI up to 100 per cent under the automatic route in :

i. power trading subject to compliance with Regulations under the Electricity Act, 2003

ii. processing and warehousing of coffee and rubber.

d. To allow FDI up to 51 per cent with prior Government approval for retail trade of 'Single Brand' products, detailed guidelines for which have been notified vide Press Note 3 (2006 Series).

e. To allow under the automatic route transfer of shares from residents to non residents in financial services, and where Securities & Exchange Board of India (Substantial Acquisition and Takeover) Regulations are attracted, in cases where approvals are required from the Reserve Bank of India / Securities & Exchange Board of India (Substantial Acquisition and Takeover) Regulations / Insurance Regulatory & Development Authority. With this, transfer of shares from residents to non- residents, including acquisition of shares in an existing company would be on the automatic route subject to sectoral policy on FDI.

f. To dispense with the requirement of mandatory disinvestment of 26 per cent foreign equity in B2B-eCommerce.

FDI / NRI investment under the automatic route shall continue to be governed by the Sectoral regulations / licensing requirements.

INVESTMENT COMMISSION

The Investment Commission was set up in December 2004 with a view to make the environment in India attractive for investors. The Commission has the broad authority of the Government to engage, discuss with and invite domestic and foreign businesses to invest in India. In terms of the notification, the recommendations of the Commission are to be processed in the Ministry of Finance and will be put up to the Competent Authority for approval. All policy decisions emerging from the recommendations of the Investment Commission would be put up to CCEA for approval.

The Commission in its report of February 2006 titled "Investment Strategy for India" has observed that for sustaining growth at over 8 per cent per annum will require an increase in investment levels in the economy from approximately 28 per cent of GDP to about 32 per cent of GDP. Over the next 5 years, this translates to a cumulative investment of about $ 1.5 trillion. The Commission has set itself the goal to increase the level of FDI from the existing level of about $ 5 billion to $ 15 billion by 2007-08.

The Commission studied 25 key sectors spanning Infrastructure, Manufacturing, Services, Natural Resources and the Knowledge Economy. They represent a significant part of the economy and would require an aggregate investment of US $ 525- $ 550 billion over the next 5 years.

The Commission has recommended that for the enhancing growth, there is a need to identify a few National Thrust Areas with defined national goals, where all impediments for growth are removed, and where appropriate incentives are provided, to encourage investment in the Thrust Areas and / or in supporting infrastructure. The purpose of the defined Thrust Areas would be to elevate India's presence in these areas regionally or even globally. This has been successfully done in countries such as Singapore (Biotechnology) and Ireland (Pharmaceuticals, IT).

The Thrust Areas could include :

- Tourism
- Power
- Textiles
- Agro-processing

These specific sectors would also create enormous job opportunities (both direct and indirect) resulting in a considerable boost to the economy.

The Commission has also recommended for India's hosting of mega events focusing the country's attention on infrastructure development while also building national pride. Some ideas are : 2010 Olympics, Football World Cup, Formula One Racing, etc.

The Commission in its report has observed that as a result of their extensive investor interactions, many representations on policy / procedures or other impediments were resolved through reference to Government.

The report contains 115 sector-specific recommendations covering sectors such as infrastructure, Manufacturing and Services and 37 multi-sectoral recommendations. These recommendations relate to 27 Ministries / Departments and feedback from all major Ministries / Departments have since been received. Of these 115 sector-specific recommendations. Major part of the action has already been completed or is in the process of being implemented in respect of 86 recommendations.

FDI Inflows : Final figure of FDI received during the financial year 2005-2006 (from April 2005 to March 2006) show an inflow of US$ 5,548.3 million (Rs. 24,612.59 crore) compared to US$ 3,218.7 million (Rs. 14,652.75 crore) during the corresponding period in 2004-2005. This represents an increase of 72 per cent in dollar terms.

Within this the cumulative FDI inflows from August 1991 till March 2006 aggregate US$ 38.90 billion (Rs. 1,61,410.93 crore). The details of FDI inflows as at Annex.

NRI UNIT

Major Functions of NRI Unit which is a part of the Investment Division are as under : (a) Euro-equity / Foreign Currency Convertible bonds policy. (b) Foreign Institutional Investors Portfolio Investment Policy. (c) Investment Policy for Non-Resident Indian. (d) Policy governing opening up of branch / liaison / project office by foreign companies and coordination in respect of individual proposals referred to Government by RBI. (e) Matters related to Indian Investment Centre, an autonomous body under the Ministry of Finance.

Annex

FACT SHEET ON FOREIGN DIRECT INVESTMENT (FDI)

From AUGUST 1991 to MARCH 2006

(updated up to March 2006)

I. FDI INFLOWS:

A. CUMULATIVE FDI INFLOWS (equity capital components only):

1.	Cumulative amount of FDI inflows (from August 1991 to March 2005)	Rs. 1,36,798 crore	US$ 33,356 million
2.	Amount of FDI inflows (from April 2005 to March 2006)	Rs. 24,613 crore	US$ 5,549 million
3.	Cumulative amount of FDI inflows (up to March 2006)	Rs. 1,61,411 crore	US$ 38,905 million

Note: FDI inflows include amount received account of advances pending for issue of share for the years 1999 to 2004.

B. FDI INFLOWS DURING CURRENT FINANCIAL YEAR 2005-2006:

Particulars	Amount of FDI inflows	
	(In Rs. Crore)	(In US$ mn)
1. April 2005	1,172	268
2. May 2005	2,844	654
3. June 2005	1,149	264
4. July 2005	1,411	324
5. August 2005	1,739	399
6. September 2005	1,238	282
7. October 2005	1,844	412
8. November 2005	3,410	746
9. December 2005	1,587	347
10. January 2006	2,141	482
11. February 2006	563	127
12. March 2006	5,515	1,244
2005-2006 up to March 2006	24,613	5,459
2004-2005 up to March 2005	14,653	3,219
Percentage growth over last year	(+) 67.95	(+) 72.30

C. YEAR-WISE FDI INFLOWS:

Sl. No.	Year (April-March)	Amount of FDI inflows	
		(In rupees crore)	(In US$ million)
1.	1991-1992 (Aug-March)	409	167
2.	1992-1993	1,094	393
3.	1993-1994	2,018	654
4.	1994-1995	4,312	1,374
5.	1995-1996	6,916	2,141
6.	1996-1997	9,654	2,770
7.	1997-1998	13,548	3,682
8.	1998-1999	12,343	3,083
9.	1999-2000	10,311	2,439
10.	2000-2001	12,645	2,908
11.	2001-2002	19,361	4,222
12.	2002-2003	14,000	3,134
13.	2003-2004	12,117	2,634
14.	2004-2005	17,138*	3,755*
15.	2005-2006 (upto March 2006)	24,613	5,549
	Grand Total	**1,61,411**	**38,905**

Note: * An Amount of US$ 536 million (Rs. 2,485 crore), includes as advance for issue of share during 2004-2005.

D. SHARE OF TOP INVESTING COUNTRIES FDI INFLOWS (Financial year-wise)

Amount Rupees in crore (US$ in million)

Ranks	Country	Agust 1991 to March 2002	2002-03 (April-March)	2003-04 (April-March)	2004-05 (April-March)	2005-06 (April-March)	Cumulative Inflows (from Aug. 1991 to March 2006)	%age with inflows
1.	Mauritius	27,446 (6,731)	3,766 (788)	2,609 (567)	5,141 (1,129)	11,411 (2,570)	50,403 (11,785)	37.18
2.	U.S.A	12,248 (3,188)	1,504 (319)	1,658 (360)	3,055 (669)	2,210 (502)	20,675 (5,038)	15.25
3.	Japan	5,099 (1,299)	1,971 (412)	360 (78)	575 (126)	925 (208)	8,931 (2,124)	6.59
4.	Netherlands	3,856 (986)	836 (176)	2,247 (489)	1,217 (267)	340 (76)	8,497 (1,994)	6.27
5.	U.K.	4,263 (1,106)	1,617 (340)	769 (167)	458 (101)	1,164 (266)	8,271 (1,979)	6.10
6.	Germany	3,455 (908)	684 (144)	373 (81)	663 (145)	1,345 (303)	6,570 (1,582)	4.81
7.	Singapore	1,997 (515)	180 (38)	172 (37)	822 (184)	1,218 (275)	4,388 (1,050)	3.24
8.	France	1,947 (492)	534 (112)	176 (38)	537 117)	82 (18)	3,276 (779)	2.42
9.	South Korea	2,189 (594)	188 (39)	110 (24)	157 (35)	269 (60)	2,912 (752)	2.15
10.	Switzerland	1,200 (325)	437 (93)	207 (45)	353 (77)	426 (96)	22,622 (636)	1.93
Total FDI Inflows*		92,611 (23,829)	14,932 (3,134)	12,117 (2,634)	17,138 (3,754)	24,613 (4,549)	1,61,411 (38,905)	-

Note: (i) * Includes inflows under NRI Schemes of RBI, stock swapped and advances pending issue of shares.

(ii) Cumulative country-wise FDI inflows (from August 1991 to March 2006) -

E. SECTORS ATTRACTING HIGHEST FDI INFLOWS:

Amount Rupees in crore (US$ in million)

Ranks	Country	Amount of FDI Inflows					%age with FDI Inflows
		2002-03 (April-March)	2003-04 (April-March)	2004-05 (April-March)	2005-06 (April-March)	Cumulative Inflows (from August 1991 to March 2006)	
1.	Electrical Equipments (including computer software & Electronics	3,075 (644)	2,449 (532)	3,281 (721)	6,499 (1,451)	23,709 (5,496)	17.49
2.	Telecommunications (radio paging, cellular mobile, basic telephone service)	1,058 (223)	532 (116)	588 (129)	3,023 (680)	14,337 (3,372)	10.58
3.	Transportation Industry	2,173 (455)	1,417 (308)	815 (179)	983 (222)	13,315 (3,178)	9.82
4.	Services Sector (financial & non-financial)	1,551 (926)	1,235 (269)	2,106 (469)	2,565 (581)	12,804 (3,091)	9.45
5.	Fuels (Power + Oil Refinery)	551 (118)	521 (113)	759 (166)	416 (94)	10,976 (2,581)	8.10
6.	Chemicals (other than fertilizers)	611 (129)	94 (20)	909 (198)	1,979 (447)	8,580 (2,143)	6.33
7.	Food Processing Industries	177 (37)	511 (111)	174 (38)	183 (42)	4,702 (1,179)	3.47
8.	Drugs & Pharmaceuticals	192 (40)	502 (109)	1,343 (292)	760 (172)	4,311 (1,007)	3.18
9.	Cement and Gypsum Products	101 (21)	44 (10)	1 (0)	1,970 (452)	3,231 (747)	2.38
10.	Metallurgical Industries	222 (47)	146 (32)	881 (192)	681 (153)	2,816 (655)	2.08

Note: Cumulative sector-wise FDI inflows (from August 1991 to March 2006) - Annexure-B

REGION-WISE / STATE-WISE BREAK-UP FOR FDI INFLOWS[1] RECEIVED

(as reported to Regional Offices of RBI) (from January 2000 to March 2006)

Ranks	RBI's-Regional Office[2]	State covered	Amount of FDI Inflows		% age with FDI Inflows (in rupee terms)
			Rupees In crore	US in million	
1.	New Delhi	Delhi, Part of UP & Haryana	23,074.29	5,116.9	24.58
2.	Mumbai	Maharashtra, Dadra & Nagar Haveli, Daman & DIU	20,535.68	4,533.5	20.90
3.	Bangalore	Karnataka	6,984.17	1,546.3	7.44
4.	Chennai	Tamil Naru & Pondicherry	5,432.52	1,193.2	5.79
5.	Hyderabad	Andhra Pradesh	3,083.46	681.7	3.28
6.	Ahmedabad	Gujarat	2,883.90	631.9	3.07
7.	Chandigarh	Chandigarh, Punjab, Haryana, Himachal Pradesh	1,481.41	320.3	1.58
8.	Kolkata	West Bengal, Sikkim, Andaman & Nicobar Islands	1,277.24	280.7	1.36
9.	Panaji	Goa	494.42	107.6	0.53
10.	Kochi	Kerala, Lakshadweep	333.45	73.6	0.34
11.	Bhubaneswar	Orissa	315.88	70.6	0.34
12.	Bhopal	Madhya Pradesh, Chhattisgarh	168.84	37.3	0.18
13.	Guwahati	Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura	41.74	9.0	0.04
14.	Jaipur	Rajasthan	18.76	4.2	0.02
15.	Patna	Bihar, Jharkhand	2.74	0.6	0.00
16.	Kanpur	Uttar Pradesh, Uttaranchal	0.03	0.0	0.00
17.	Not Indicated[3]		27,764.24	6,118.8	29.57
	TOTAL		93,892.76	20,726.3	100.00
18.	Advance of inflows (from 2000 to 2004)		8,962.22	1,962.8	-
19.	Stock Swapped		284.87	61.2	-
20.	RBI's-NRI Schemes589.15		134.4	-	
	TOTAL FDI INFLOWS (From January 2000 to March 2006)		1,03,729.00	22,884.7	-

[1] Includes a equity capital components only.
[2] The Region-wise FDI inflows are classified as per RBI's - Region-wise inflows, furnished by RBI, Mumbai.
[3] Represents inflows through acquisition of existing shares by transfer from residents. For this, regional wise information is not provided by Reserve Bank of India.

INSURANCE DIVISION

LIFE INSURANCE CORPORATION OF INDIA

The Life Insurance Corporation of India (LIC) with its central office in Mumbai and seven Zonal Offices at Mumbai, Kolkata, Delhi, Chennai, Hyderabad, Kanpur and Bhopal operates through 101 divisional Offices including one Salary Savings Scheme (SSS) Division at Mumbai and 2048 branch offices. As on 31 March 2006, LIC has 10,52,283 agents spread all over the country. The Corporation also transacts business abroad and has offices in Fiji, Mauritius and United Kingdom. An overseas subsidiary of the Corporation namely Life Insurance Corporation (International) E.C. Bahrain was established in 1989. LIC is associated with joint ventures abroad in the field of insurance, namely, Ken-India Assurance Company Limited, Nairobi, a registered joint venture company in Kathmandu, Nepal by the name of Life Insurance Corporation (Nepal) Limited in collaboration with Vishal Group Limited, a local industrial Group. LIC (Lanka) Ltd., the latest joint venture subsidiary of the Corporation was established in Sri Lanka on 1 March 2003 in partnership with local company M / s Bartleet & Company Ltd. An off-shore company LIC (Mauritius) off-shore Limited was registered to tap the African insurance market.

During 2005-06, the total new business under Individual Assurances was Rs 2,87,530.24 crore under 315.73 lakh policies. The Group Insurance business during the year 2005-06 brought new business premium of Rs 3,919.01 crore under 11,845 schemes covering 51.27 lakh people. The sum assured in respect of conventional Group Insurance Business is Rs 25,216.88 crore. In addition, LIC sold 19,48,025 new individual pension policies including Future Plus.

The Life Fund of LIC as on 31 March 2006 as per the provisional results amounts to Rs 4,63,147.62 crore. During 2005-06 the Corporation made payments of Rs 3769.04 crore under Death Claim cases, Rs 24743.42 crore under Maturity Claims and Rs 1977.54 crore under annuities.

Under Varishtha Pension Bima Yojana the Corporation made payments of Rs 75.47 crore under Death Claim cases and Rs 656.08 crore under annuities.

SOCIAL SECURITY GROUP INSURANCE SCHEME

A Social Security Fund (SSF) was set up in 1988-89 for providing social security through Group Insurance Scheme to the weaker and vulnerable sections of the society. The SSF is administered by LIC for meeting insurance requirements of the segment.

People belonging to 24 occupational groups / areas have been covered under this scheme. The scheme has been replaced by Janshree Bima Yojana from August 2000. But the renewal of the groups covered earlier is permitted.

JANASHREE BIMA YOJANA

The Janashree Bima Yojana was launched on 10 August 2000. The Scheme has replaced Social Security Group Insurance Scheme (SSGIS) and Rural Group Life Insurance Scheme (RGLIS).

The Scheme provides for an insurance cover of Rs 20,000 on natural death. On death / total permanent disability due to accident, the benefit is Rs 50,000 increased to Rs 75,000 w.e.f. 15 August 2006. On partial permanent disability due to accident, the benefit is Rs 25,000 increased to Rs 37,500 w.e.f 15 August 2006. The premium for the scheme is Rs 200 per member. 50 per cent premium under the scheme will be met out of Social Security Fund. The balance premium is to be borne by the member and /

or Nodal Agency. As on 31 March 2006 about 39.87 lakh have been covered. The balance in Social Security Fund as on 31 March 2006 is Rs 808 crore.

KRISHI SHRAMIK SAMAJIK SURAKSHA YOJANA

The multi-benefit scheme for the agricultural workers, commenced on 1 July 2001, provides life insurance protection, periodical lump sum survival benefit and pension to those who were between the age of 18-50 years. Minimum membership of the group at commencement should be 20.

Gram Panchayat was to act as nodal agency and with the help of NGO / SHG or any other agency, would identify the agricultural workers.

As on 31 March 2006, 29,074 agricultural workers have been covered. Sale of new policies discontinued from December 2003. No new lives are to be added even under existing schemes at the time of renewal.

SHIKSHA SAHAYOG YOJANA

The scheme was launched on 31 December 2001, with the object to lessen the burden of parents in meeting the educational expenses of their children. It provides scholarships to students of parents living below or marginally above poverty line and who are covered under Janashree Bima Yojana and are studying in 9th to 12th standard (including ITI courses)

A scholarship amount of Rs 300 per quarter per child is paid for a maximum period of four years and for maximum two children of a member covered under Janashree Bima Yojana. No premium is charged for this benefit. As on 31 March 2006, scholarship were disbursed to 3,20,253 beneficiaries.

GENERAL INSURANCE CORPORATION OF INDIA

The General Insurance Corporation of India (GIC) was approved as the ''Indian Reinsurer'' on 3 November 2000. As the "Indian Reinsurer" GIC has been giving reinsurance support to four public sector and other private general Insurance Companies. The Corporation has commenced full-fledged life reinsurance operations from 1 April 2003. It continues its role as a reinsurance facilitator by managing marine hull pool and terrorism pool on behalf of India Insurance industry. The reinsurance programme of GIC aims at optimising the retention within the country and developing adequate reinsurance capacity.

During the year, the Corporation continued to offer maximum support for all classes of business to the Indian insurers. It has availed a new cover, the Peak Risk Facility, thereby increasing the PML capacity to Rs 3,000 crore from Rs 1,500 crore. The capacity of terrorism pool managed by GIC has increased to Rs 500 crore from 1 April 2005 from the earlier limit of Rs 300 crore. The GIC continues to lead the reinsurance programme of the companies in Maldives, Kenya, Malaysia, Mauritius, Middle-East, Africa and Sri Lanka. In the process, it has emerged as a preferred Reinsurer in the Afro-Asian region. During the year 2005-06, the net premium income of the Corporation has grown to Rs 4,234,88 crore as against Rs 4,614.87 crore in the previous year. The net incurred claims were at Rs 4,573.07 crore, i.e., 107.98 per cent as against Rs 3702.80 crore in the previous year, i.e., 80.25 per cent. Profit before tax was Rs 442.94 crore as on 31 March 2006 compared to Rs 800.08 crore as on 31 March 2005. The Corporation has recorded a profit after tax of Rs 598.52 crore as against Rs 200.02 crore in the previous year. The total assets and networth have grown to Rs 26,424.03 crore and Rs 4,759.13 crore respectively as on 31 March 2006.

The Corporation has its presence in foreign reinsurance business through its representative offices at London and Moscow. Apart from reinsurance business, GIC continues to participate in the share capital of Kenindia Insurance Company Ltd., Kenya and India International Insurance Pte. Ltd., Singapore. The Corporation has subscribed to 30 per cent of the holdings in the initial share capital of LIC (Mauritius) Offshore Ltd., a joint venture Company promoted by LIC of India in Mauritius.

PUBLIC SECTOR GENERAL INSURERS' ASSOCIATION OF INDIA

After de-linking from GIC in 2000, the four General Insurance Companies, namely, National Insurance Company Ltd., New India Assurance Company Ltd., Oriental Insurance Company Ltd., and United India Insurance Company Ltd., formed an association known as 'GIPSA' with headquarters in Delhi. The four public sector companies have a network of 95 Regional Offices, 1373 Divisional Offices, 2533 Branch Offices in India and 55 Overseas Offices.

The gross premium income of the four public sector general insurance companies during 2005-06 was Rs 14,997 crore as against Rs 13,973 crore during 2004-05, representing a growth of 10.73 per cent. Profits after tax for 2005-06 increased to Rs 1,425 crore from Rs 1,172 crore in 2004-05. The companies have paid a total dividend of Rs 266 crore in 2005-06 to the government. The market share of these companies has gone down to 72.87 per cent in 2005-06 from 77.49 per cent in 2004-05 with the entry of private players.

AGRICULTURE INSURANCE COMPANY OF INDIA LIMITED

A separate organisation for Agriculture Insurance called 'Agriculture Insurance Company of India Ltd.' (AICIL) has been incorporated under the Companies Act, 1956 on 20 December 2002 with the capital participation from General Insurance Corporation of India (GIC), four public sector general insurance companies viz., (i) National Insurance Company Ltd., (ii) New India Assurance Company Ltd., (iii) Oriental Insurance Company Ltd., and (iv) United India Insurance Company Ltd. and NABARD. The promoter's subscription to the paid-up capital is - 35 per cent by GIC, 30 per cent by NABARD and 8.75 per cent each by the four public sector general insurance companies. The authorised capital of the AICIL is Rs 1,500 crore, while the initial paid-up capital is Rs 200 crore. While AICIL would underwrite crop insurance to begin with, it will, in due course, cover other allied rural / agricultural risks also. National Agriculture Insurance Scheme (NAIS) which was being implemented by the General Insurance Corporation of India (GIC) has since been transferred to the new AICIL.

National Agricultural Insurance Scheme : The Government of India, in co-ordination with the GIC, have introduced a new Scheme, called the National Agricultural Insurance Scheme (NAIS), from Rabi 1999-2000 season replacing the Comprehensive Crop Insurance Scheme (CCIS). The scheme is being implemented by the newly set-up Agriculture Insurance Company of India Ltd., on behalf of the Ministry of Agriculture who are the Administrative Ministry. The main objective of the scheme is to protect the farmers against losses suffered by them due to crop failure on account of natural calamities, such as drought, flood, hailstorm, cyclone, fire pest / diseases, etc., so as to restore their credit worthiness for the ensuring season. The new scheme is available to all the farmers — loanee and non-loanee both, irrespective of their size of holding. It envisages coverage of all food crops (cereals, millets and pulses), oilseeds and annual horticultural / commercial crops, in respect of which past yield data is

available for adequate number of years. Among the annual commercial / horticultural crops, eleven crops, namely, sugarcane, potato, cotton, ginger, onion, turmeric, chillies, jute, tapioca, annual banana and pineapple are presently covered. All other annual horticultural and commercial crops will be covered subject to the condition of availability of past yield data.

The premium rates for Bajra and Oilseeds are 3.5 per cent of sum insured or actuarial rates whichever is less while for Cereals, other Millets and Pulses, the premium rates are 2.5 per cent of sum insured or actuarial rates whichever is less. During Rabi season, the premium rate for wheat is 1.5 per cent of the sum insured or actuarial rates, which ever is less, and, for other food crops and oilseeds, premium rate is 2 per cent of the sum insured on actuarial rates, whichever is less. In the case of annual commercial / horticultural crops, actuarial rates are charged. 50 per cent subsidy in premium is allowed in case of small and marginal farmers. The subsidy is shared equally by States / Union Territories and Central Government. The subsidy in premium will be phased out on a sun-set basis over a period of five years.

Farm Income Insurance Scheme : In order to target the two critical components of a farmer's income, namely, and yield and price, through a single policy instrument, the Department of Agriculture and Cooperation formulated the Farm Income Insurance Scheme (FIIS). This Scheme was conceived to provide income protection to the farmers by integrating the mechanism of insuring production as well as market risks. The main features of the scheme are given in Box. Initially the scheme has been taken up on a pilot basis in Rabi 2003-04 in 18 districts of 12 States for wheat and paddy. The premium rates under the scheme is based on actuarial calculations. The Government of India provide subsidy of 75 per cent of the premium for small and marginal farmers and 50 per cent for others. During Rabi 2003-04, a total of 1.8 lakh farmers were covered over an area of 1.9 lakh hectares. Premium amounting to Rs 14.1 crore was generated as against the sum insured of Rs 239 crore. Claims to the tune of 1.5 crore were paid for the season. The scheme continued during Kharif 2004 season also covering 20 districts in 4 states covering a total of 2.22 lakh farmers over an area of 2.02 lakh hectares. Premium amounting to Rs 15.68 crore was generated against a sum insured of Rs 177.56 crore.

Rainfall Insurance "Varsha Bima" : Agriculture Insurance Company of India Ltd. (AICIL) introduced Rainfall Insurance Scheme known as "Varsha Bima" during 2004 South West monsoon period. Varsha Bima provided for five different options suiting varied requirements of farming community these are (i) seasonal rainfall insurance based on aggregate rainfall from June to September (ii) sowing failure insurance based on rainfall between 15 June and 15 August, (iii) rainfall distribution insurance with weight assigned to different weeks between June and September, (iv) agronomic index constructed on the basis of water requirements of crops at different pheno-phases, (v) catastrophe option, covering extremely adverse deviation of 50 per cent and above in rainfall during the season. Varsha Bima has been piloted in 20 rain-gauge area spread over Andhra Pradesh, Karnataka, Rajasthan and Uttar Pradesh. A total of 1050 farmers were covered with a premium income of Rs 6.12 lakh against a sum insured of Rs 2.62 crore. Claims of Rs 5.63 lakh were paid.

Universal Health Insurance Scheme (UHIS) : The four public sector general insurance companies have been implementing Universal Health Insurance Scheme for improving the access of health care to poor families. The scheme provides for reimbursement of medical expenses up to Rs 30,000 towards hospitalisation floated

rural and social sectors; and licensing of agents, corporate agents, brokers, and third party administrators. This is in addition to the regulatory framework provided for registration of insurance companies, maintenance of solvency margin, investments and reporting requirements.

Since opening up, the number of participants in the industry has gone up from five insurers (including Life Insurance Corporation of India but excluding General Insurance Corporation) in the year 2000 to 31 insurers each in the life and non-life segments (including specialised insurers, viz., Export Credit Guarantee Corporation and Agriculture Insurance Company). Star Health and Alliance Insurance Company set up as a non-life insurance is proposing to concentrate exclusively on health insurance. The premium underwritten by the industry has grown from Rs 45,677.57 crore in the year 2000-01 to Rs 1,02,376.51 crore in 2004-05. As per provisional statistics, the first year premium underwritten by the life insurers during 2005-06 was Rs 35,897.96 crore. As per provisional estimates, non-life insurers underwrote a premium of Rs 20,421.17 crore in 2005-06. The channels introduced in the market to underwrite premiums include agents, brokers, corporate agents including banks, referral arrangements and sales through the internet. As on date there are over 24.60 lakh agents in the insurance sector. The industry has been strengthened with additional commitment of funds to support the activities of the insurers. The paid up equity capital (provisional) of the insurers stood at Rs 9004.96 crore as on 31 March 2006, as against Rs 1692 crore as on 31 March 2001, in line with substantial insurance business growth and to meet Regulatory Solvency requirements, confirming their long-term commitment to the industry.

Efforts at increasing consumer awareness have been made at both the industry and regulatory levels. The competitive market conditions have also resulted in driving down premium rates / charges in respect of certain products and in improving the quality of services offered by the insurers. The competition pursuant to the establishment of new insurers has brought various innovative products into the market, including popularising the concept of capital market linked life insurance products. In addition to the conventional channels, NGOs and e-choupals are being tapped to sell insurance in the rural markets for providing coverage to informal sectors, backward classes and economically weaker sections. The Authority has also invited comments on the Concept Paper on Micro-Insurance, which could provide the framework for insurers designing suitable micro-insurance products. Norms are being framed to recognise micro insurance agents, like Non-Government Organisations (NGO), Micro Finance Institutions (MFI) and Self Help Groups (SHG). It is envisaged that micro insurance would facilitate penetration of insurance to the rural and remote areas.

At present fire, motor and engineering segments of the non-life industry are tariffed. After liberalisation of the industry and entry of private players it was expected that de-tariffing would be introduced across the board. In view of the continuous losses incurred by the industry under the motor portfolio, the Authority had constituted Justice Rangarajan Committee, followed by S.V. Mony Committee to examine various issues in the Motor Portfolio. As a follow-up of the recommendations, the Authority has decided to de-tariff all businesses currently under tariff from 1 January 2007. The business that will be de-tariffed are Fire, Motor, Engineering and Workmen’s Compensation Insurances.

DISINVESTMENT

The disinvestment of Government equity in Central Public Sector Enterprises (CPSEs) began in 1991-1992. Till 1999-2000, it was primarily through sale of minority shares in small lots. From 1999-2000 till 2003-04, the emphasis of disinvestment changed in favour of Strategic Sale viz. sale of a large block of shares alongwith transfer of management control to a Strategic Partner identified through a process of competitive bidding. After 2004-2005, disinvestment realisations have been through sale of small portions of equity. The total proceeds from disinvestment between 1991-1992 and 31st May, 2007 amounted to Rs 51.608.58 crore, consisting of the following:

Item	Amount Realised (Rs. Crore)	per cent
Receipts through sale of minority shareholding in CPSEs	33.543.56	65.00
Receipts through saleof majority shareholding of one CPSE to another CPSE	1317.23	2.55
Receipts through Strategic sale	6,344.35	12.29
Receipts from other related transactions	4,005.17	7.76
Receipts from other related transactions	4,005.17	7.76
Receipts from sale of residual sharholding disinvested CPSEs/companies	6,398.27	12.40
TOTAL	**51,608.58**	**100**

Policy Framework : The National Common Minimum Programme (NCMP) adopted by the Government outlines the policy of the Government with respect to the public sector including disinvestment of Government equity in CPSEs. The salient features of NCMP in this regard are as follows:

(a) The Government is committed to a strong and effective public sector whose social objectives are met by its commercial functioning. But for this, there is need for selectivity and a strategic focus. The Government is pledged to devolve full managerial and commercial autonomy to successful, profit-making companies operating in a competitive environment. Generally profit-making companies will not be privatised.

(b) All privatisations will be considered on a transparent and consultative case-by-case basis. The Government will retain existing "navratna" companies in the public sector while these companies can raise resources from the capital market. While every effort will be made to modernise and restructure sick public sector companies and revive sick industry, chronically loss-making companies will either be sold-off, or closed, after all workers have got their legitimate dues and compensation. The Government will induct private industry to turn around companies that have potential for revival.

(c) The Government believes that privatisation should increase competition, not decrease it. It will not support the emergence of any monopoly that only restricts competition. It also believes that there must be a direct link between privatisation and social needs – like, for example, the use of privatisation revenues for designated social sector schemes. Public sector companies and nationalised banks will be encouraged to enter the capital market to raise resources and offer new investment avenues to retail investors.

At present, the Government has decided, in principle, to list, large profitable CPSEs on domestic stock exchanges and to selectively sell small portions of equity in listed, profitable CPSEs, other than the navratnas.

Constitution of National Investment Fund

The Government has constituted a "National Investment Fund" (NIF) in 2005-06 into which the proceeds from disinvestment of Government equity in CPSEs would be channelised. NIF would be maintained outside the Consolidated Fund of India and would be professionally managed by selected Public Sector Mutual Funds to provide sustainable returns without depleting the corpus. 75 per cent of the annual income of NIF will be used to finance selected social sector schemes, which promote education, health and employment. The residual 25 per cent of the annual income of NIF will be used to meet the capital investment requirements of profitable and revivable CPSEs that yield adequate returns, in order to enlarge their capital base to finance expansion / diversification.

During 2004-05, Government realized Rs. 2,684.07 crore from the sale of 43.29 crore equity shares of Rs. 10 each of National Thermal Power Corporation Ltd., Rs. 64.81 crore from the sale of shares of employees of IPCL and Rs. 15.99 crore as balance amount of realization from the Offer for Sale in ONGC.

During the year 2005-06, in January 2006, the Government realized a sum of Rs. 1,567.60 crore from the sale of 8 per cent of equity out of its shareholding of 18.28 per cent in Maruti Udyog Limited (MUL), to public sector financial institutions and banks. The average realization was Rs. 678.24 per share. Further, Rs. 2.08 crore was received by the Government in March 2006, from the sale of 31,507 equity shares in MUL to officers / employees of MUL at a price of Rs. 660 per share.

The residual Government sharholding of 10.27 per cent equity in MUL was sold in May, 2007 through the differential pricing method to Indian public sector financial institutions, public sector banks and Indian mutual funds. Government realised Rs. 2366.94 crore for the sale. The average realization per share was Rs. 797.49.

CM DIVISION

The Capital Market Division is responsible for formulating policies relating to protection of the interest of investors in securities and promotion of the development of and the regulation of the securities markets. In particular, it is responsible for a) institutional reforms in securities markets, b) building regulatory and markets institutions, c) strengthening investor protection mechanism and d) providing and efficient legislative framework for securities markets. In pursuance of these objectives, the Division Administers the Securities Contracts (Regulation) Act, 1956, Securities and Exchange Board of India Act, 1992 and the Depositories Act, 1996.

The measures taken during 2005-06 include:

(a) Primary Market

- SEBI Disclosure and Investor Protection (DIP) Guidelines, 2000 relating to book-building issues were amended to introduce a specific allocation of 5 per cent for Mutual Funds, proportionate allotment to Qualified Institutional Buyers (QIBs) and margin requirement for QIBs.
- In order to ensure availability of floating stocks on a continuous basis and maintain uniformity for the purpose of continuous listing, it was decided to

amend SEBI (DIP) Guidelines, 2000 prescribing minimum public shareholding of 25 per cent in case of all listed companies barring a few exceptions.

- In order to assist the investors, particularly the retail investors, in-principle approval was given for grading of IPOs by the rating agencies at the option of the issuers.
- In order to rationalise disclosure requirements, it was decided to do away with voluminous and repetitive disclosures in case of rights issues and public issues by the listed companies which have a satisfactory track record of filing periodic returns with the stock exchanges and have a comprehensive mechanism for satisfactory redressal of investor grievances.
- Listed companies were advised to comply with the provision of revised Clause 49 of the Listing Agreement on corporate governance, including appointment of the independent directors by 31 December 2005.

(b) Secondary Market

- In order to ensure faster and hassle-free refunds, it was decided to extend the facility of electronic clearing services to refunds arising out of public issues, initially at 15 centres where clearing houses are managed by the Reserve Bank of India.
- In order to facilitate execution of large trades without impacting the market, the stock exchanges were permitted to provide a separate trading window for block deals subject to certain conditions. BSE and NSE activated this window with effect from 14 November 2005.
- SEBI advised the Depositories / DPs not to levy any charges when a Beneficiary Owner (BO) transfers all securities lying in his / her account to another branch of the same DP or to another DP of the same depository or another depository, provided the BO accounts at the transferee DP and at transferor DP are one and the same.
- In order to prevent off-market trades prior to the commencement of trading, SEBI advised Depositories that, in case of IPOs, the ISINs of securities should be activated only on the date of commencement of trading on the stock exchanges.
- It was decided to resume in phases registration under the MAPIN Regulations to obtain the Unique Identification Number with biometric impression for a trade order value of Rs 5 lakh and above.
- In order to streamline the settlement system consistent with IOSCO CPSS Task Force recommendations, it was mandated that all transactions executed on the stock exchanges would be necessarily settled through the clearing corporation / clearing house of the stock exchanges.
- In order to expedite the Corporatisation and Demutualisation (C&D) of stock exchanges, SEBI approved and notified C & D schemes of 19 stock exchanges during 2005-06. The NSE and OTCEI have been exempted from submitting C & D schemes as they were already notified as corporatised and demutualised stock exchanges.
- The cumulative debt investment limit for FII investment in debt securities for 2006-07 has been revised upward within the overall limit of External Commercial Borrowings (ECBs). While such limit for Government securities (G-sec), including Treasury Bills, was raised from US $ 1.75 billion to US $ 2.0 billion, the same for the corporate debt was increased from US $ 0.5 billion to US $ 1.5 billion.

- In order to provide flexibility to corporate restructuring, SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997 is being amended to provide for removal of restrictions on market purchases and preferential allotments. The outgoing shareholders can sell entire stake to the incoming acquirer in case of takeover. However, if the target company's minimum public shareholding falls below the prescribed minimum, the restoration should take place through a framework provided by the revised Clause 40A of the Listing Agreement.
- In order to simplify the existing framework, the SEBI (Delisting of Securities) Guidelines, 2003 were amended making it possible for stock exchanges to delist the shares of companies non-compliant with the Listing Agreement.

(c) Collective Investment Scheme

- Mutual funds were allowed to participate in the derivatives market in the same manner as the FIIs, subject to position limits.
- The SEBI (Mutual Funds) Regulations, 1996 were amended and a notification was issued on 12 January 2006 permitting mutual funds to introduce Gold Exchange Traded Funds (GETFs) in India subject to certain investment restrictions.
- Mutual funds were permitted to invest in ADRs, GDRs and foreign securities. In case, disclosures to this effect were not made in the offer document, all mutual funds were advised to send a written communication to the investors about the proposed investment.
- The Venture Capital Funds were allowed to invest in securities of foreign companies subject to the conditions stipulated by RBI and SEBI from time to time.

EXTERNAL COMMERCIAL BORROWINGS

External Commercial Borrowings are being permitted as an additional source of funds to Indian corporates and PSUs for financing expansion of existing capacity as well as for fresh investment, augmenting the resources available domestically. ECBs refer to commercial loans, [in the form of bank loans, buyers' credit, suppliers' credit, securitised instruments (e.g. floating rate notes and fixed rate bonds)] availed from non-resident lenders with a minimum average maturity of 3 years. The ECBs are approved within an overall annual ceiling, consistent with prudent debt management, keeping in view the balance of payments position and the level of foreign exchange reserves of the country.

The policy is regularly reviewed in consultation with the Reserve Bank of India (RBI) keeping in view the current macroeconomic situation, challenges faced in external sector management and the experience gained so far in administering ECB policy. In the background of developments in recent months, Government announced amendments to the ECB policy on 3 June 2005 and in January 2006.

The ECB can be accessed under two routes, namely, (i) Automatic Route and (ii) Approval Route. ECB for investment in the real sector - industrial sector, especially infrastructure sector in India – is under the Automatic Route, i.e., will not require RBI / Government approval. The maximum amount of ECB which can be raised by an eligible borrower under the Automatic Route is US$ 500 million during a financial year. The following is permissible under the Automatic route: (a) ECB up to US $ 20 million or equivalent with minimum average maturity of 3 years. (b) ECB above US$

20 million and up to US$ 500 million or equivalent with minimum average maturity of 5 years.

All cases, which fall outside the purview of the Automatic Route, will be decided by an Empowered Committee of RBI.

Eligible borrowers : Under the extant policy, corporates registered under the Companies Act, 1956, except financial intermediaries such as banks, financial institutions (FIs), housing finance companies and Non-Banking Finance Companies (NBFCs), are eligible. Subsequently, NGOs engaged in micro-finance activities have been permitted to raise ECB up to US$ 5 million during a financial year for permitted end-use, under the automatic route. The Multi State Co-operative Societies engaged in manufacturing activities in real sector with financial solvency and up-to-date audited balance sheet have been permitted to access ECB under the Approval Route. Detailed guidelines have been issued by RBI. The eligibility / end-use has been expanded as follows: (a) ECB by NBFCs will be permitted under the Approval Route from multilateral financial institutions, reputed regional financial institutions, official export agencies and international banks towards import of infrastructure equipment for leasing to infrastructure projects with a minimum average maturity of 5 years. (b) Foreign Currency Convertible Bonds (FCCBs) by Housing Finance Companies with strong financials satisfying criteria to be notified by RBI, will be permitted under the Approval Route.

Individuals, Trusts and non-profit making organisations, except NGOs as mentioned above, are not eligible to raise ECB.

Financial institutions dealing exclusively with infrastructure or export finance such as IDFC, IL&FS, Power Finance Corporation, Power Trading Corporation, IRCON and EXIM Bank are considered on a case-by-case basis i.e., through the approval route.

Banks and financial institutions which had participated in the textile or steel sector restructuring package as approved by the Government are permitted to the extent of their investment in the package and assessment by RBI based on prudential norms. Any ECB availed for this purpose so far is deducted from their entitlement.

Recognised Lenders : Borrowers can raise ECB from internationally recognised sources such as : (i) international banks, international capital markets, multilateral financial institutions (such as IFC, ADB, CDC, etc.) (ii) export credit agencies and (iii) suppliers of equipment, foreign collaborators and foreign equity holders.

Interest Rate Spreads : All ECBs are subject to the following maximum spreads over six month LIBOR, for the respective currency of borrowing or the applicable benchmark(s) as the case may be:

Minimum Average Maturity Period	All-in-Cost Ceilings Over Six Months Libor*
3 years and up to 5 years	200 basis points
More than 5 years	350 basis points

* All-in-cost ceilings includes rate of interest, other fees and expenses in foreign currency except commitment fee, pre-payment fee and fees payable in Indian rupees. Moreover, the payment of withholding tax in Indian rupees is excluded for calculating the all-in-cost.

End-use : Permissible end-use / restrictions are explained below : (a) ECB can be raised only for investment (such as import of capital goods, new projects,

modernisation / expansion of existing production units) in real sector - industrial sector including small and medium enterprises (SME) and infrastructure sector - in India. Infrastructure sector is defined as : (i) power, (ii) telecommunication, (iii) railways, (iv) roads including bridges, (v) ports (both sea and air), (vi) industrial parks and (vii) urban infrastructure (water supply, sanitation and sewage projects); (b) ECB proceeds can be utilised for overseas direct investment in Joint Ventures (JV) / Wholly Owned Subsidiaries (WOS) subject to the existing guidelines on Indian Direct Investment in JV / WOS abroad; (c) Utilisation of ECB proceeds is permitted in the first stage acquisition of shares in the disinvestment process and also in the mandatory second stage offer to the public under the Government's disinvestment programme of PSU shares; (d) Utilisation of ECB proceeds is not permitted for investment in capital markets by corporates or for on-lending, except for cases mentioned above; (e) Utilisation of ECB proceeds is not permitted in real estate. The term 'real estate' excludes development of townships, housing, built-up infrastructure and construction-development projects as defined by Ministry of Commerce and Industry, Department of Industrial Policy and Promotion, SIA (FC Division), Press Note 3 (2002 Series) dated 4 January 2002; (f) End-uses of ECB for working capital, general corporate purpose and repayment of existing Rupee loans are not permitted.

Guarantees : Issuance of guarantee, standby letter of credit, letter of undertaking or letter of comfort by banks, financial institutions and NBFCs relating to ECB is not normally permitted. Applications for providing guarantee / standby letter of credit or letter of comfort by banks, financial institutions relating to ECB in the case of SME will be considered on merit subject to prudential norms.

Parking of ECB proceeds overseas : ECB proceeds should be parked overseas until actual requirement in India.

Prepayment : Under the earlier guidelines, prepayment of ECB up to US $ 100 million was permitted without prior approval of RBI, subject to compliance with the stipulated minimum average maturity period as applicable for the loan. It has now been decided to revise this upward to US$ 200 million, subject to minimum average maturity of five years. Pre-payment of ECB for amounts exceeding US$ 200 million or prepayment of ECBs with minimum average maturity of 3-5 years would be on the Approval Route.

Refinance of existing ECB : Refinancing of existing ECB by raising fresh ECBs at lower cost is permitted subject to the condition that the outstanding maturity of the original loan is maintained.

Foreign Currency Convertible Bonds (FCCBs) : The policy for ECB is also applicable to FCCBs in all respects, except in the case of Housing Finance Companies for which criteria will be notified by RBI.

The amendments to the ECB guidelines will come into force from the date of notification of regulations / directions by RBI under the Foreign Exchange Management Act, 1999.

As announced in Budget 2006-07, the limit on FII investment in Government securities has been increased from $1.75 billion to $ 2 billion and the limit on FII investment in corporate debt from $ 0.5 billion to $ 1.5 billion. The cap of US $ 2 billion is applicable to FII investments in dated Government Securities and Treasury Bills only, both under 100 per cent debt route and the general 70:30 route. FII investment in corporate debt with commutative sub-ceiling of US $ 1.50 billion would be over and above the sub-ceiling of US $ 2 billion for Government debt. Also the ceiling for FII

investments in Government securities and for corporate debt is not fungible. The overall ceiling for ECBs including limit for investment by FIIs for the financial year 2006-07, as recommended by RBI, has been increased from US $ 15 billion to US $ 18 billion.

PENSION REFORMS

On 23 August 2003, the Government decided to introduce a new restructured defined contribution pension system called New Pension System (NPS) for new entrants to Central Government service, except to Armed Forces, in the first stage, replacing the existing defined benefit system. It was operationalised from 1 January 2004 through a notification dated 22 December 2003. An interim Pension Fund Regulatory and Development Authority (PFRDA) was constituted through a Government resolution dated 10 October 2003 as a precursor to a statuary regulator and became operational from 1 January 2004

Till the architecture is fully in place, the Central Pension Accounting Office (CPAO) under the Controller General of Accounts, Department of Expenditure is acting as the interim Central Recordkeeping Agency (CRA). Contributions are currently being credited into the public account earing a return equal to the GPF rate.

A Bill providing for a regulatory framework for the pension sector under the Pension Fund Regulatory and Development Authority was introduced in Parliament on 21 March 2005 and was referred to the Standing Committee on Finance. The Committee presented their report in Parliament on 26 July 2005. The recommendations of the Committee have been examined and a proposal for amending the PFRDA Bill, 2005, based on the recommendations of the Committee is under the Government's consideration.

The Bill proposes that the main mandate of PFRDA is to regulate the NPS, as amended from time to time by the Central Government. Pension Schemes already covered under the Employees Provident Fund & Miscellaneous Provisions Act, 1952 and other enactments would be specifically excluded from the architecture of the NPS including the Central Recordkeeping Agency (CRA) and pension funds. Further, the Bill provides that PFRDA will frame investment guidelines for pension funds. There are provisions empowering PFRDA to impose stringent penalties for any violation of the law and to create a special fund, tobe used for educating and protecting the interests of subscribers to schemes of pension funds.

Press releases and notifications relating to pension reforms can be assessed at the Ministry of Finance website ww.finmin.nic.in.

Investment Guidelines for Non-government Provident Funds, Superannuation Funds and Gratuity Funds : The Ministry of Finance notifies the investment pattern for non-Government provident funds, superannuation funds and gratuity funds. The investment pattern dated 24 January 2005 notified by the Ministry of Finance prescribes that incremental accretions by such funds shall be invested as follows :

- 40 per cent in Capital and State Government securities and / or units of gilt funds regulated by SEBI and any other negotiable securities fully and unconditionally guaranteed by the Central / State Government or any State Government, provided that exposure of a trust to any individual gilt fund should not be more than 5 per cent of its total portfolio at any point of time;
- 25 per cent in bonds / securities of public financial institutions and public sector companies including public sector banks provided that these instruments have

an investment grade rating from at least two credit rating agencies; and / or term deposit receipts upto three years issued by public sector banks, and Collateral Borrowing and Lending Obligations (CBLOs) issued by Clearing Corporation of India Limited and approved by RBI;

- Another 30 per cent can be invested in any of the above categories as decided by the Trustees. Upto 10 per cent of this can be invested in private sector debt instruments which have an investment grade rating from at least two credit rating agencies and / or in equity-linked schemes of mutual funds regulated by SEBI;
- Upto 5 per cent can be invested in shares of companies that have an investment grade debt rating from at least two credit rating agencies.

The investment pattern dated 24 January 2005 notified by the Ministry of Finance can be accessed at the Ministry of Finance website www.finmin.nic.in.

International Ratings : In April 2006 S&P revised their long-term foreign currency rating on India from BB+ (with stable outlook) to BB+ (with positive outlook). Moodys' reaffirmed their last year's Foreign Currency Rating for the year of 2006 at Baa3 with a stable outlook, while Fitch's current rating is BBB-with a stable outlook.

Indian Direct Investment in Joint Ventures / Wholly Owned Subsidiaries Abroad / Bilateral Investment Promotion and Protection Agreement (BIPA) : The policy on Indian Direct Investment Abroad has been consistently liberalised in the recent past contributing to significant growth in overseas investment by Indian corporates. The liberalised policy is aimed at enabling Indian industry to access new markets and technologies with a view to increasing their competitiveness globally and promote exports.

The policy was further liberalised to enable Indian corporates to make investments in Nepal and Bhutan in freely convertible currencies, in addition to Indian rupees. The inward remittances of interest / dividends / profits from the investment in Nepal and Bhutan have been allowed in freely convertible currencies, in addition to Indian rupees.

The approved Indian Direct Investment Abroad has increased by more than four times from 290 approvals in 1996-97 to 1229 approvals in 2003-04. During the same period, the value of approved investments has increased by more than 2.5 tonnes, from US$ 557 million to US$ 1450 million. During the year 2004-05 (Apr to Nov 2004), 793 approvals were issued for overseas investments worth US$ 987 million

During the year Bilateral Investment Promotion and Protection Agreements were signed / ratified with Cyprus, Bahrain, Indonesia and Yemen and negotiations were conducted with Saudi Arabia Uruguay, Canada, Latvia and SAARC countries for finalising and concluding the agreement. So far agreements have been signed with 57 countries of which 47 have been ratified and others are in various stages of ratification.

ADR / GDR / FCCBS ISSUES

A scheme was initiated during 1992 / 1993 to allow the Indian Corporate Sector to have access to the Global Capital Markets through issue of Foreign Currency Convertible Bonds (FCCBs) / Equity Shares under the Global depository Mechanism.

Liberalisation in the guidelines are announced from time to time and the recent initiatives are listed below :

- Pricing guidelines for Indian listed companies FCCB / ADR / GDR were brought in alignment with SEBI's guidelines on domestic capital issues.
- Unilisted companies issuing FCCB / ADR / GDRs are now required prior or simultaneous listing in domestic stock exchange(s).
- Unlisted companies, which have issued ADR / GDR / FCCB, now required to list in domestic market by 31 March 2006. However, unlisted companies which had accessed FCCBs, ADR / GDRs in terms of guidelines at 22 May 1998 and are not making profit, be permitted to comply with listing condition on the domestic stock exchanges within three years of having started making profit. However, no fresh issues of FCCBs, ADR / GDRs by such companies will be permitted without listing first in the domestic exchanges.
- In order to rationalise the ADR / GDR guidelines further, Government exempted the companies, going in for an offering in the domestic market and a simultaneous or immediate follow on offering (within 30 days of domestic issue) through ADR / GDR issues wherein GDRs / ADRs are priced at or above the domestic price, from the requirement of the revised pricing guidelines.
- Unlisted Indian companies, which had issued FCCBs, ADRs / GDRs prior to 31 August 2005 and are not making profit are also permitted to sponsor such issues against existing shares and are permitted to comply with listing conditions on the domestic stock exchanges within three years of having started making profits.

PORTFOLIO INVESTMENTS BY FOREIGN INSTITUTIONAL INVESTORS

A scheme for attracting portfolio from Foreign Institutional Investors (FIIs) has been operational since September 1992. Under this scheme, FIIs including institutions such as Pension Funds, Mutual Funds, Investment Trusts, Asset Management Companies, Nominee Companies and Incorporated / Institutional Portfolio Managers or their power of attorney holders are allowed to invest in all the securities traded on the primary and secondary markets as also in unlisted companies. Such securities would include shares, debentures and warrants issued by companies which are listed / to be listed on the Stock Exchanges in India and the schemes floated by domestic mutual funds.

Such portfolio investments by FIIs are subject to investment ceilings as indicated below:

(i) Individual FII / Sub-account : 10 per cent issued and paid-up capital in a company.

(ii) Aggregate by all FIIs : 24 per cent of the issued and paid-up capital in a company which could be increased up to the sectoral cap / statutory ceiling, as applicable, by the Indian company concerned by passing a resolution by its Board of Director followed by passing of a special resolution to that effect by its General Body.

The Lahiri Committee which was constituted to identify the sectors in which Foreign Institutional Investors (FIIs) portfolio investments will not be subject to the sectoral limits for Foreign Direct Investment except in specified sectors has submitted its report to Government. Besides making recommendation which would apply, in

general, to all sectors, Committee has made specific recommendations for some sectors. The report of the Committee has been put on the web-site of this Ministry (www.finmin.nic.in) for wider dissemination. Consultation with concerned Department for implementing the recommendations has been taken up separately.

EXPENDITURE

The Department of Expenditure comprises eight main divisions, namely: (i) Establishment Division; (ii) Plan Finance-I Division; (iii) Plan Finance-II Division; (iv) Finance Commission Division; (v) Controller General of Accounts; (vi) Cost Accounts Branch; (vii) Staff Inspection Unit and (viii) Integrated Finance Division.

ESTABLISHMENT DIVISION

Establishment Division is the nerve centre for the entire gamut of the service conditions of the Central Government employees having financial content. Basically, these include revision / prescription of pay scales, fixation of pay and various allowances. The proposals received from various Ministries / Departments of the Government seeking clarification in regard to revision and prescription of pay scales, increments, deputation allowance and cadre review of various categories of posts are examined in this division keeping in view the equity and comparable relativities and duties. Besides, this Division also functions as the Cadre Authority for the Indian Cost Accounts Service (ICAS) and also attends to vigilance related issues. A Public Grievance Redressal Machinery with Joint Secretary in charge of Administration as the Director of Grievances is also functioning in this department. A “Complaint Committee” has also been constituted in this Department as per the guidelines of the Supreme Court for redressing the grievances of women.

PLAN FINANCE-I

The Plan Finance-I Division handles matters relating to States’ finances and financing of States’ Annual Plans. It release Central Assistance to States for their Annual Plans including the assistance for externally aided projects, additional Central assistance for Jawaharlal Nehru National Urban Renewal Mission , Hill Areas / Western Ghats Development Programmes, Border Areas Development Programmes, Accelerated Irrigation Benefit Programmes, Accelerated Power Development Programme, Additional Central assistance for other specific schemes / projects of the States, Special Plan Assistance to States, National Social Assistance Programme including Annapurna, Special Central assistance for Backward Region Grant Fund, National E- Governance Programme.

The various types of assistance allocated / released during 2006-07 and the Budget provision made for the Schemes during 2007-08 are as under:-

(Rs. in Crores)

Sl. No.	Items / Schemes	Allocation for 2006-07 (RE) Stage Stage	Amount released dduring 2006-07	Allocation for at the (BE) 2007-08 (only the Grant Component)
A.	**Plan Assistance**			
1.	Normal Central Assistance for States’ Plan	14016.61	14110.48	15408.02

2.	Addl. Central Assistance for Externally Aided Projects	8397.00	7441.32	3690.00
3.	Special Plan Assistance to Arunachal Pr., Assam, Chhattisgarh, Himachal Pr., J&K, Manipur, Punjab, Uttaranchal & U.P.	2160.00	1723.33	2637.00
4.	Spl. Central Assistance for Jammu & Kashmir	936.30	936.30	0.00
5.	Addl. Central Assistance for other specific Scheme / Projects	0.00	1087.16	0.00
6.	Addl. Central Assistance for Nutrition Programme for Adolescent Girls (NPAG)	162.77	64.47	162.77
7.	Central Assistance for Accelerated Power Development Reform Programme (APDRP)	650.00	1021.71	800.00
8.	Central Loan Assistance for Accelerated Irrigation Benefit Programme (AIBP)	1650.00	2485.99	3580.00
9.	National Social Assistance Programme i ncluding Annapurna (NSAP)	2480.97	2480.97	2391.91
10.	Central assistance for Hill Areas / Western Ghats Development Programme	225.00	224.76	225.00
11.	Special Central Assistance for Border Areas Development Programme (BADP)	520.00	520.00	520.00
12.	Central assistance for Rashtriya Sam Vikas Yojana / Backward Region Grant Fund	1250.00	1250.00	1130.00
13.	National E. Governance Action Plan (NEGAP)	150.00	121.76	500.00
14.	ACA for Sub-Mission on Urban Infrastructure and Governance (SMUIG)	1771.93	1262.96	2474.90
15.	ACA for Urban Infrastructure development for Small and Medium Towns (UIDSSMT)	740.00	1248.97	702.22
16.	ACA for Sub Mission on Basic Services Urban Poor (SMBSUP)	722.00	901.77	1322.34
17	ACA for Integrated Housing and Slum Development (IHSDP)	362.00	492.61	488.04
18.	T Sunami Rehabilitation Programme (TRP)	304.00	163.35	326.00
19	Brihan Mumbai Storm Water Drain Project (BRIMSTOWA), Mumbai	0.00	0.00	400.00
20	Commonwealth Youth Games, Pune	0.00	0.00	50.00
	TOTAL (A)	**36498.58**	**37537.91**	**36808.20**

PLAN FINANCE-II DIVISION

Plan Finance-II Division is primarily concerned with matters relating to the Central Plan. PF.II Division serves as a window within the Finance Ministry, which has an overview of the entire canvas of development activity of the Central Government, both at the project level and sectoral policy level. In respect of development schemes and projects, the focus has been on improving the **quality** of development expenditure through better project formulation, emphasis on outputs, deliverables, impact assessment, projectisation (Mission approach) and convergence.

Guidelines for Formulation, Appraisal and Approval of Government funded Plan schemes / projects have been issued vide O.M No.1(2) / PF.II / 03 dated 7 May 2003. Accordingly to these guidelines, which are in force w.e.f.1 July 2003, Ministries / Departments are required to prepare Feasibility Report (FR) for obtaining 'in-principle'

approval of Planning Commission and a Detailed Project Report (DPR) for appraisal of the scheme / project in respect of all Plan Schemes / Projects costing Rs.50 crore or more.

Plan Finance-II is the Secretariat for the Public Investment Board (PIB). The PIB considers investment proposals of Central Government Ministries in regard to their Public Sector Undertakings. Under the existing guidelines, Central Sector Projects costing Rs.200 Crore and above are considered by PIB. Secretary (Expenditure) is the Chairman of the PIB and Joint Secretary (Plan Finance-II) acts as the Secretary to the Board. Plan Finance-II Division is also the focal point for delegation of financial powers to Expenditure Finance Committees (EFCs) and Standing Finance Committees (SFCs). **New guidelines with revision in the extant powers of delegation for appraisal and approval of Plan Schemes and Projects are on the anvil and shall be announced in the current year.**

During the period January 1, 2006 to December 31, 2006, **49** meetings of the Expenditure Finance Committee (EFC) chaired by Secretary (Expenditure) considered Plan investment proposals / schemes of various Ministries / Departments costing **Rs.47,763.45 crore**. Also, **15** meetings of Public Investment Board (PIB) were held and **27 projects** with a capital outlay of **Rs.28,606.20 crore** were recommended for approval of competent authority. The Ministry / Department wise position of projects considered by PIB is as below :

S.No.	Ministry / Department	No.of projects recommended for approval	Cost (Rs. crore)
1.	M / o Power	11	20679.00
2.	D / o Coal	8	3428.90
3.	M / o Civil Aviation	3	716.13
4.	D / o Road Transport & Highways	1	1066.77
5.	D / o Shipping	3	2228.40
6.	D / o Heavy Industry	1	487.00
	Total	**27**	**28606.20**

Plan Finance-II Division conducts the Internal and Extra Budgetary Resources (I&EBR) exercise in respect of Central Public Sector Enterprises (CPSEs). The gross I&EBR assessed for the Annual Plan 2007-08 (BE) worked out to Rs.1,65,052.76 Crore (Internal Resources (IR) of Rs.95,874.63 Crore and Extra Budgetary Resources (EBR) of Rs.69178.13 Crore). Plan Finance-II Division also compiled projections of Internal & Extra Budgetary Resources (I&EBR) in respect of CPSEs for XI Plan (2007-2012). The gross I&EBR assessed for the XI Plan worked out to Rs. 1,084,621 Crore. The Internal Resource (IR) and Extra Budgetary Resource (EBR) worked out were Rs.4,93,833 Crore and Rs.5,90,788 Crore respectively. The Planning Commission decides the extent to which the IR / I&EBR will be utilised for funding the Plan.

Plan Finance-II Division also deals with financial restructuring of Central PSUs on the recommendations of Bureau for Restructuring of Public Sector Enterprises (BRPSE). Plan Finance-II Division also deals with issues relating to Food, Fertilizer and Petroleum subsidies.

CONTROLLER GENERAL OF ACCOUNTS

According to Article 150 of the Constitution of India the accounts of the Union and the States shall be kept in such form as the President may on the advice of Comptroller and Auditor General of India prescribe. This function of the President has been allocated to Controller General of Accounts in terms of Article 77 (3) of Constitution of India. The Controller General of Accounts (CGA) is the principle advisor to the Government of India on accounting matter and is responsible for establishing and maintaining a sound and efficient accounting and financial reporting system.

Principles and Form of Accounts: The CGA prescribes general principles and form of accounts of government relating to Union as well as State governments and frames rules and manuals relating thereto. In exercise of this power, CGA is entrusted with the responsibility of framing and administering Government Accounting Rules, Central Government Accounts (Receipts & Payments) Rules, Central Treasury Rules, Accounting Rules for Treasuries, Account Code for State Accountant Generals, Account Code – Vol III, List of Major and Minor Heads of Account, Civil Accounts Manual, Suspense Manual, Drawing and Disbursing Officers Manual and Inspection Code.

Budgetary Control, Payments, Receipts Collection and Accounting : The CGA, through Chief Controller / Controller of Accounts and their Pay and Accounts Offices, carries out the budget control, payments, receipts collection and accounting functions of the Union. The CGA also prescribes the banking arrangement for government transactions and closely monitors movement of cash through a network of over 20,000 bank branches authorised to handle government transactions, into and out of the Government cash balance with Reserve Bank of India.

Financial Reporting : The CGA provides regular feedback to the Finance Minister and other line Ministries on the status of Government finances. He submits a critical fiscal analysis to the Finance Minister every month and releases data on Central Government Operations on the Internet in compliance with the Special Data Dissemination Standards (SDDS) of IMF. The CGA also compiles the annual accounts of the Union Government. The accounts comprising the Union Government Finance Accounts and the Appropriation Accounts, are presented before the Parliament duly audited by the Comptroller and Auditor General of India. A summary of these accounts is presented by the CGA in the form of “Accounts at a Glance” with a view to provide better understandability to the users of these documents.

Technical Advice on Accounting Matters : The CGA provides advice to all Ministries / Departments and State Governments on various accounting matters. The advice rendered by the CGA covers aspects related to maintenance of accounts, accounting procedures for new schemes / programmes or activities, collection of receipts and its crediting into Government account, release of payment and it’s accounting, creation and operation of funds within Government accounts, banking arrangements of making payments and collecting receipts, etc.

Disbursement of pension: The CGA is also responsible for disbursement and accounting of pension payments to Government employees retiring from all civil ministries. The functions are discharged through Central Pension Accounting Office (CPAO), which was created with the primary objective of simplifying the procedure of pension disbursement and accounting and providing better quality service to the pensioners. The CPAO is the central budgeting and accounting unit for the civil pensions. It functions as a single point interface between the Government, the banks

and pensioners. With the introduction of modern technology, CPAO is able to serve over 6,00,000 pensioners spread all over the country through the network of bank branches specially authorised for pension disbursement.

Internal Audit: The Internal Audit function is carried out with the help of Internal Audit units in every Ministry, supervised by the respective Controller of Accounts; the Inspection Wing of CGA also provides guidance to the Controller of Accounts on this subject.

The CGA also brings out annual review report based on the performance of Internal Audit Wing of various Ministries / Department, highlighting major irregularities, such as those involving over payments, non-recovery of Government dues, losses or infructuous expenditure, irregular procurement, etc., observed during the course of internal audit.

Capital Restructuring and Disinvestment of PSUs: The Controller General of Accounts is responsible for evaluating and processing the proposals relating to the capital restructuring of various public sector undertakings (PSUs) of the Union Government and its submission to the Ministry of Finance. Generally the proposals involve appraisal of the strategy proposed for reviewing the unit. Each proposal is evaluated on the basis of company specific options available. In evaluating these proposals a clear distinction is made between the Government's role as a regulator and its commercial interests as owner of an industry participant.

With the setting up of Board of Reconstruction of Public Sector Enterprises, the Capital Restructuring Cell in the Office of Controller General of Accounts has been offering their comments on the proposals for consideration of the Board as well as on proposals for restructuring received from administrative Ministries.

Human Resource Development: The CGA manages the cadre of the Indian Civil Accounts Service (ICAS) and the entire accounts personnel deployed in civil ministries and is responsible for the entire gamut of personnel management including their recruitment, transfers, promotions, training, and capacity building both within the country as well as abroad, and periodical reviews of cadre strength and distribution.

Training: The Institute of Government Accounts and Finance (INGAF) has been setup in the year 1992 under the CGA to meet the training needs of the Civil Accounts personnel. The Institute has developed itself into a centre of academic excellence in the field of Government Accounts and Finance. It acts as a 'think-tank' of the Civil Accounts Organisation providing feedback to the Controller General of Accounts on the training needs and various technical matters.

Besides training the officers and staff of the Civil Accounts Organisation the Institute has also been training personnel of various Ministries and Departments of the Central as well as State Governments. INGAF also provides consultancy services to various Government and autonomous bodies. The Institute has been conducting training for the accounts and finance personnel of several foreign governments under the Internal Technical and Economic Cooperation (ITEC) programme of the Ministry of External Affairs and also under bilateral cooperation. The Institute has its main centre at Delhi and regional centres at Mumbai, Chennai and Kolkata.

FINANCE COMMISSION DIVISION

Finance Commission Division undertakes processing of and follow up action on the various recommendations and suggestions of Finance Commission's reports

including issue of Presidential / Executive Orders and sanctions. Under Article 280 of the constitution, a Finance Commission is to be constituted every fifth year or at such earlier time as President on specified aspects of Centre-State Fiscal relations. The recommendations of the Commission together with an Explanatory Memorandum as to the action taken thereon, are laid before each House of Parliament.

The Twelfth Finance Commission (TFC) was appointed by the President on 1st November 2002 under the Chairmanship of Dr. C. Rangarajan. It submitted its report covering all the aspects of its mandate on December, 17 2004. The TFC report covering the five year period commencing 1st April, 2005 together with the Explanatory Memorandum as to the action taken on the recommendations of the Finance Commission was laid on the Table of the both Houses of the Parliament on 26.2.2005. Govt. of India has accepted recommendations of the TFC.

Debt Consolidation and Relief Facility (2005-10)

Twelfth Finance Commission has not recommended continuation of Fiscal Reforms Facility recommended by the Eleventh Finance Commission, instead a comprehensive Debt Consolidation and Waiver scheme (2005-10) has been recommended for States, which is also based on their fiscal performance.

This debt relief scheme comprises of consolidation, reschedulement and lowering of interest rate to 7.5 per cent that shall be available to all States with effect from the year they enact the Fiscal Responsibility legislation. Fiscal Responsibility laws would need to have following minimum core provisions:-

1. Eliminating revenue deficit by 2008-09
2. Reducing fiscal deficit to 3% of GSDP
3. Bringing annual reduction targets of revenue and fiscal deficits
4. Bringing out annual statement giving prospects for the State's economy and related fiscal strategy
5. Bringing out special reports along with the budget giving details of number of employees in government, public sector and aided institutions and related salaries.

26 States have enacted their Fiscal Responsibility Legislation to date and debt consolidation has been completed for 24 States. Based on the quality of fiscal correction and reduction in revenue deficit, Debt write off for 2005-06 has been awarded to 14 States to the extent of Rs. 3878.94 crore and 19 States have been awarded debt waiver for 2006-07 to the extent of Rs. 4594.89 crore, so far.

Share in Central Taxes and Duties and Grants-in-aid

The 12th Finance Commission in their report for the period 2005-10 has recommended a total transfer of Rs.7,55,752 crore (Share in central taxes and duties of Rs. 6,13,112. Crore and Grants-in-aid of Rs. 1,42,640 crore) to States. The grants-in-aid recommended by TFC under the following sectors and the releases so far are :

(Rs. in crore)

Sl.No.	Purpose of Grant	During 2005-10	Released (till 30.7.2007)
1.	Local Bodies grants	25000	8039.21
2.	Centre's share in Calamity Relief	16000	7143.85

3.	Non-Plan revenue deficit grants	56856	30260.31
4.	Grant for education	10172	4412.68
5.	Grant for health	5887	2564.56
6.	Grant for maintenance of roads and bridges	15000	5284.08
7.	Grant for maintenance of public buildings	5000	1570.12
8.	Grant for maintenance of forest.	1000	436.92
9.	Grant for heritage conservation.	625	198.46
10.	Grant for State-specific needs	7100	1603.99

Financing of relief expenditure

The 12th Finance Commission has recommended the continuation of the scheme of calamity relief fund in its present form with contribution from the Centre and the States in the ratio of 75: 25.

The Commission has also recommended continuation of the scheme of NCCF in its present form with core corpus of Rs. 500 crore. The outgo from the fund may continue to be replenished by way of collection of National Calamity Contingent Duty and levy of special surcharges.

Out of the Centre's share of CRF, a sum of Rs. 2622.94 crore was released in 2005-06, Rs. 3521.06 crore was released in the year 2006-07 and Rs. 999.85 crore was released during the year 2007-08 (upto 30.7.2007) to the States.

Out of the NCCF, central assistance of Rs. 3061 .44 was released during the year 2005-06 and Rs. 1962.05 crore during the year 2006-07 and Rs. 13.51 crores released during 2007-08 (upto 30.7.2007), to the States towards calamities of rare severity.

Office of Chief Adviser (Cost)

Office of Chief Adviser Cost (CAC), erstwhile Cost Accounts Branch, is one of the divisions functioning in the Department of Expenditure. Office of the CAC is responsible for advising the Ministries and Government Undertakings on cost accounts matters and to undertake cost investigation work on their behalf. It is a professional agency staffed by Cost / Chartered Accountants.

It was set up as an independent agency of the Central Government to verify the cost of production and to determine the fair selling price for Government Departments including Defence purchases in respect of the cases referred to. The role of the office was further enlarged and extended to fixing prices for a number of products covered under the Essential Commodities Act, such as, Petroleum, Steel, Coal, Cement, etc. under the Administered Price Mechanism (APM). Since cost / pricing work in the Ministries increased significantly, various other Ministries / Departments started to have their in house expertise by seeking posting of services of officers for work needing expertise in cost / commercial accounts matters.

As a repository of expertise in cost, management and financial accountancy in government, this office is rendering professional assistance to different Ministries and Government agencies. In the Post liberalization era, the office is receiving and conducting studies in synchronization with the liberalization policy of the Government in addition to the traditional areas of cost-price studies. The office of the CAC ventured into new areas and is conducting studies having greater relevance to the changing situation.

Chief Adviser Cost Office, as a repository of expertise in Cost and Management Accounting matters, over the years, had emerged as a prime professional agency in dealing with matters relating to costing and pricing, studies on cost reduction, cost efficiency, industry level studies for determining fair prices, studies on user charges, central excise abatement matters, cost-benefit analysis of projects, Commercial Financial Management analysis, appraisal of capital intensive projects, profitability analysis and application of modern management tools evolving cost and commercial financial accounting etc.

Chief Adviser Cost's Office is also cadre controlling office for the Indian Cost Accounts Service (ICAS) and render advice on matters relating to the cadre administration including training requirements of the officers for continuous up-gradation of their knowledge and skills, besides being responsible for undertaking various type of studies referred to above. The office also provides necessary coordination, input and training for proper human resource development of ICAS Officers in addition to rendering professional guidance to the ICAS officers working in different participating organizations.

The major areas of professional functions of the office of the Chief Adviser Cost are as under: -

(i) Assisting all Central Government Ministries / Departments / Organizations / State Governments / Union Territories in solving complex Price / Cost related issues, in fixing fair prices for various services / products and rendering advice to various Ministries / Departments in cost matters.

(ii) Examination / Verification of claims between Government Departments / Public Sector undertakings and suppliers arising out of purchase contracts.

(iii) Determining prices of products and services supplied to Government, in order to enable Government Departments to negotiate the prices with the supplying organizations.

(iv) Unit specific as well as industry level studies for determining cost / fair prices and making recommendations for fair prices / rates for products and user charges for services, revision of these charges and also to determine reasonableness of prices charged, duty structure, etc.

(v) Valuation of assets and liabilities of business taken over and shares of public sector undertakings.

(vi) Functioning as Chairman / Members of Committee constituted by Government / different Departments related to Cost / financial and Pricing matters.

(vii) Cost and performance audit of industrial undertaking.

(viii) Concurrent Internal audit of Escalations claims of urea manufacturing units determined by Fertiliser Industry Coordination Committee.

(ix) Subsidy detrimental and verification of claims.

(x) Cost Accounting System for departmental undertakings / Autonomous bodies.

(xi) Time and Cost Overruns of major projects. Efficiency and Competitiveness studies.

(xii) Arbitrator in resolving pricing disputes.

(xiiii) Determination of value for purposes of Central Excise.

(xiv) Determination of Abatement Rate for purposes of Central Excise.

(xv) Review of special audits u / s 14 A of the Central Excise Act.

Till March 2007, 7859 number of studies / reports were completed by the Office of Chief Adviser Cost and out of this 184 reports were completed during the year 2006-07. The studies completed during the year varied widely in nature and may be broadly categorized under the following heads:

(i) Pharmaceutical Industry

Determination of norms for Conversion Cost, Packing Charges and Process Loss for fixation of prices of Drug formulations under DPCO 1995.

(ii) Review of costing system in respect of Government of India Press

(iii) Study on User Charges

(iv) Fair price of goods purchased / services purchased by various Government Department on single tender basis or from limited sources

(v) Fair selling price of products / service where Govt. is the Producer / Service provider as well as the user

(vi) Fixation of service charges for the services rendered by a Govt. Department / Agency on behalf of the other

(vii) Determination of subsidy for catering (Parliament House Complex and Prime Minister's Office)

(viii) Preparation of final accounts on accrual accounting principles in case of Departmental manufacturing units

(ix) Concurrent Audit of escalation claims paid by FICC

95 Reports in respect of Concurrent Audit of Equated Freight Rate / Escalation claim of various Fertilizer companies were issued during the year 2006-07.

(x) Miscellaneous studies

- Far- flung areas freight subsidy scheme 2002 for petrol and diesel.
- Fixation of fair price of Ayurvedic Medicines supplied by M / s Pharmaceutical Corporation (IM) Kerala Limited.
- Abatement of Excise duty and Service Tax- Representation of MUL and TML and Titan watches / Auto spares / FOTSH, Etc.
- Subsidy of new bottling plant at Port Blair, Sitara, Itewa, Shimoga, Unna, Dimapur, Coimbatore, Palaghat, Chengalpat, Gurgaon.
- Development of the film processing Laboratories for the year 2006-07.
- Costing of Renewable energy devices when used for remote village electrification in respect of SPB System and Bio-mass.
- Processing charges for converting Thorium concentrate into Thorium Oxalate Dry.
- Built up price of Petrol and Diesel.
- Fair price of Insecticides manufactured and supplied by HIL.
- Fair price fixation of traction electrics supplied by BHEL to Indian Railways during 2002-03.
- Unit cost of inserting a health massage of the back portion of Biometric Access Cord – Lord Venkateshwara Temple, Tirupati.
- Review of costing system and fixation of Common Hourly Rate & Overheads Percentage in respect of Government of India Presses.

Major Committees Represented

Officers of Chief Adviser Cost Office because of their expertise in commercial accounting have also served as Chairman / Members on the following major multi-disciplinary Inter-Ministerial / Expert Committees:

(1) National Pharmaceuticals Pricing Authority, Department of Chemicals Petrochemicals

(2) Board of Governors and the society of the National Institute of Financial Management (NIFM), Faridabad.

(3) Advisory Committee on Abatement for Excise Duty and Service Tax – Department of Revenue.

(4) Governing Body of Tear Smoke Unit, BSF, Tekanpur.

(5) Standing Committees set up by various Ministries / Departments for fixation of responsibility for time and cost overrun.

(6) Fertilizer Industry Coordination Committee, Department of Fertilizers.

(7) Committee to consider the procurement of agricultural commodities under the Market Intervention Scheme.

(8) Committee to monitor the construction of 400-pax-cum-100 tonne cargo vessel for Andaman & Nicobar Administration and Lighthouse Tender Vessels for Department of Lighthouses and Light Ships by HDPE Ltd.

(9) Committee for the study of pricing / costing of services and products of Survey of India.

(10) Committee to evaluate the proposal of C-DAC for comprehensive computerization of the operations in the Patent Office, Controller General of Patents, Designs & Trademarks, Department of Industrial Policy and Promotion.

(11) Advisory Committee constituted for examination of draft Cost Accounting Rules framed by the Department of Company Affairs in respect of various products.

(12) Standing Committee of State Secretaries of Stamps and Registration.

(13) Committee on operationalisation and implementation of energy saving measures in the Central Government Buildings / establishments.

(14) Committee for uniform costing and preparation of proforma accounts for various mints and presses.

(15) Committee of Experts / Stakeholders to fix and approve Benchmark Costs of System to be used in RVE programme.

(16) Committee to examine issues relating to under recoveries of the PSU Oil Marketing Companies.

(17) Committee to have in-depth study of various policies and practices outlined in the draft accounting manual for Government of India Presses.

Emerging Role of Chief Adviser Cost Office

After liberalization of Indian economy, there has been substantial change in the economic and industrial scenario. The importance of the cost has become much more important than ever before in the competitive atmosphere. The role of the Government is also rapidly changing from the administrator to facilitator and regulator. In the changed scenario, the role of Office of Chief Adviser Cost is expected to be enlarged

and in addition to the functions being performed at present, it would be focusing on the following new areas in the coming years:

To act as a pivotal body for determination of User Charges.

- To function as residual regulatory authority as it is not practical to create such authority in each sphere / for each Ministry and its cost effectiveness too.
- Provide professional expertise to regulatory authorities.
- Technical audit of subsidy determination / tariff / price fixation / regulatory authorities.

(i) Concurrent Internal audit of various subsidy claims paid by different Ministries / Departments.

(ii) Abatement of Excise duty and Service Tax- Representation of various industries.

(iii) To act as a pivotal body for determination of User Charges of various public utilities e.g. information & broadcasting, higher education, public health, water supply, transport, tourism, etc.

(iv) To assist revenue authorities in matters relating to and arising out of transfer pricing.

(v) Social Cost benefits Analysis study of various Government Department / Autonomous bodies.

REVENUE

The Department of Revenue exercises control in respect of revenue matters relating to direct and indirect Union taxes, through two statutory Boards, namely, the Central Board of Direct Taxes and the Central Board of Excise and Customs. The Department is also entrusted with administration and enforcement of controls and regulatory measures provided in the enactments concerning central sales tax, stamp duties, forfeiture of properties of smugglers and foreign exchange manipulators, and other fiscal statutes. Control over production and disposal of opium and its products is also vested with this Department.

DIRECT TAXES

The Income tax Department administers a number of Direct Tax Acts, namely, the Income Tax Act, 1961, the Wealth Tax Act, 1957, the Gift Tax Act, 1958, Interest Tax Act, 1974, Securities Transaction Tax Act, 2004, Banking Cash Transaction Tax Act, 2005 and Fringe Benefit Tax Act, 2004. Table 13.5 gives figures of revenue collection under the major Heads of direct taxes from the 1999-2000 onwards.

Table 13.5 : DIRECT TAXES

(Rs in crore)

Taxes	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	*2006-07
Corporation Tax	30,696	36,609	46,172	63,562	82,680	101277.16	143260
Income Tax	31,764	32,004	36,866	41387	49268	55984.62	74213.04
Interest Tax	414	189	-275	-46	50	13.24	5.02
Securities Transaction Tax	-	-	-	-	590	2559.38	4648.00
Banking Cash Transaction Tax	-	-	-	-	-	321.33	502
Fringe Benefit Tax	-	-	-	-	-	4772.35	242.70

Wealth Tax	132	135	154	136	145	250.35	242.70
Gift Tax	-0.30	(-)	(-)2	1	2	1.96	4.45

*Figure for the Financial Year 2006-07 are Provisional.

Major changes in Direct Taxes

Though the Finance Act, 2007 the basic exemption limit has been enhanced to Rs. 1,10,000/- . Tax will be levied at the rate of 10% on incomes between Rs. 1,10,000 and Rs. 1,50,000/-. On incomes between Rs. 1,50,000/- and Rs. 2,50,000/-, tax will be levied at 20%. On incomes exceeding Rs. 2,50,000/-, tax will be levied at the rate of 30%. However the basic exemption limit for a resident woman, below 65 years of age, has been enhanced to Rs. 1,45,000/-. Also the basic exemption limit for a resident individual, who is of the age of 65 years or more at any time during the previous year, has been enhanced to Rs. 1,95,000/-. The tax rates for firms and domestic companies continue to remain 30%. Surcharge and education cess rates also remain the same as in earlier year. However, companies and firms would be liable to surcharge only if their income exceeds Rs. 1 Crore. Further an additional cess, called the "Secondary and Higher Education Cess on income-tax", has been levied at the rate of 1% of income-tax and surcharge (not including the existing 2% "Education cess on income-tax") has been levied in all cases.

MEASURES UNDERTAKEN BY FINANCE ACT, 2007

Revenue Mobilisation Measures

(a) As per the earlier definition of 'India' is deemed to include the Union territories of Dadra and Nagar Haveli, Goa, Daman and Diu, and Pondicherry. This definition has been substituted with a new definition, whereby 'India' has been defined to mean 'India' as defined in Article 1 of the Constitution of India, its territorial waters, seabed and subsoil underlying such waters, continental shelf, exclusive economic zone or any other maritime zone as referred to in The Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, 1976, and the airspace above the territory and territorial waters of India.

(b) To make tax benefits focused and to channelise existing as well as future investments in key, risk-prone thrust areas, Income-tax exemption has been restricted to income of a venture capital company or venture capital fund from investments in venture capital undertakings engaged in 9 select key venture areas.

(c) The rate of dividend distribution tax on any amount declared, distributed or paid by a domestic company has been raised from 12.5% to 15%. The rate of DDT has been raised as the incidence of tax at 12.5% is low as compared to the marginal tax rate of 30% in the case of recipients. Further, as per data gathered from corporate tax returns, filed electronically till 31.12.2006, the effective corporate tax rate continues to be low at 19.26% indicating that dividends are being paid out of profits that have been suffered full tax.

(d) Tax has been levied on income distributed by a money market mutual fund or a liquid fund at the rate of 25%. This income was earlier taxable at the concessional rate of 12.5% (when distributed to individuals/HUFs) and 20% (when distributed to others) under section 115R of the Income tax Act. Tax on income distributed by other debt funds other than a Money Market Mutual Fund or

liquid fund will continue to be levied at the aforesaid rates of 12.5% and 20% respectively.

(e) Section 115JB has been amended to provide that companies available deduction under sections 10A and 10B of the Income-tax Act would now be liable to pay Minimum Alternate Tax (MAT).

(f) Sections, 115WB and 115WC of the Income-tax Act have been amended to bring Employee Stock Option Plans (ESOPs) within the ambit of Fringe Benfit Tax (FBT). The value of fringe benefits arising from grant of ESOPs to employees would be the difference between the fair market value of the shares on the date of vesting and the price paid by the employee to acquire the shares.

Rationalisation & Simplification Measures

(a) To streamline the procedure relating to registration of charitable and religious trusts and institutions in line with the recommendations of the 5th Report of the Parliamentary Committee on Subordinate Legislation (14th Lok Sabha), the existing requirement for a trust or institution to file an application for income-tax registration within one year from the date of its creation or establishment has been removed. Besides, on such registration, the discretion vested with the Commissioner to determine the period from which the exemption shall be allowed has been removed. The registration will accordingly be available from the financial year in which such application is made.

(b) Exemption on income is allowed in respect of certain charitable and religious entities, only if they are notified by the Central Government in the Official Gazette. This power has been decentralized by allowing the exemption to such entities, as may be approved by the prescribed authority. Such prescribed authority will be the Chief Commissioner / Director General authorised for this purpose by CBDT. No notification for such exemption will be issued by the Central Government on or after 1st day of June, 2007.

(c) Deduction in respect of any provision for bad and doubtful debts to be allowed in the case of cooperative banks under section 36(1)(viia).

(d) Rationalisation of provisions relating to deduction in respect of creation and maintenance of special reserve under section 36(1)(viii).

(e) With a view to avoid delay in settling cases by the Income tax Settlement Commission, which is caused because of factors like duplication of proceedings, absence of statutory time frame, the procedure for settling the cases by the Commission has been streamlined.

(f) Provisions of Banking Cash Transaction Tax (BCTT) have been amended so as to exclude the offices or establishments of the Central Government and governments of the state from purview of BCTT. The existing limit of taxable banking transactions have been enhanced from the present Rs. 25,000 to Rs. 50,000 in the case of individuals and Hindu Undivided Family.

(g) Amendment relating to carry forward and set off of accumulated loss and unabsorbed depreciation allowance in amalgamation or demerger has been carried out so as to facilitate tax neutral amalgamation / demerger of public sector companies engaged in the business of operation of aircraft and also in the case of cooperative banks.

Welfare Measures for taxpayers

(a) To allow Investor Protection Funds of commodity exchanges to have adequate funds for undertaking activities relating to the welfare of investors, exemption has been provided to income of notified investor protection funds by way of contributions received from commodity exchanges and the members thereof, on the lines as is presently available to investor protection funds set up by recognised stock exchanges.

(b) To grant income-tax exemption to compensation received by victims and their families on account of disaster, exemption from tax has been provided in respect of compensation received or receivable from the Central Government or a State Government or a local authority by an individual or his legal heir.

(c) Section 80C of the Act has been amended so as to include rural bonds issued by NABARD, and notified by the Central Government, as an additional investment avenue for investors seeking tax benefit under the said section.

(d) Keeping in view that research and development still needs some fiscal support for a few more years, weighted deduction under clause (1) of sub-section (2AB) of section 35 to be allowed for five more years.

Measures for Socio-Economic Development

(a) To enable urban local bodies to raise funds for capital investment in urban infrastructure, exemption has been provided on interest on notified bonds issued by a notified State Pooled Finance Entity, on behalf of urban local bodies.

(b) The deduction under section 80-IA has been extended to the business of operating a natural gas distribution network with a view to reduce the subsidy bill of the Government on account of subsidized LPG cylinders as it is expected that natural gas would substitute LPG.

(c) Sub-section (4) of section 80-1B of the Income-tax Act provides that industrial undertakings engaged in manufacture or production of articles or things or operation of a cold storage plant and set up during the period beginning on 1st April, 1993 and ending on 31st March, 2007, in the State of Jammu and Kashmir, are eligible for a hundred per cent, deducation of profits for a period of five assessment years, followed by twenty-five per cent. (thirty per cent, in the case of a company) for the next five assessment years. The terminal date for setting up of industrial undertakings and commencement of eligible business in the State has been extended by five more years, i.e., from 31.3.2007 to 31.3.2012. The amendment has been carried out with a view to promote the industrial development of the State of Jammu and Kashmir.

(d) A new section 80-ID has been inserted in the Income-tax Act to provide for deduction in respect of profits and gains derived from the business of hotels and convention centres in the National Capital Territory of Delhi and districts of Faridabad, Gautam Budh Nagar, Ghaziabad and Gurgaon. The amendment has been carried out with a view to provide adequate stock of hotel rooms to meet the requirement for accommodating the visitors for the Commonwealth Games which is to be hosted in Delhi in 2010 and also to boost the number of convention centres.

(e) Government has approved a pacakge of fiscal incentives and other concessions for the North-East Region, namely, the North-East Industrial and Investment Promotion Policy (NEIIPP) 2007. A new section 80-IE has been inserted in the Income-tax Act, 1961 by the Finance Act, 2007 to give effect to the

recommendations of North-East Industrial and Investment Promotion Policy (NEHPP) 2007.

Amendment in TDS provisions

(a) Amendment of section 193 of the Income-tax Act, 1961 to provide for TDS on 8% Savings (Taxable) Bonds, 2003.

(b) Increasing the threshold limit for TDS to Rs. 10,000/- under Section 194A in respect of interest payable by a banking Company or a co-operative society or on any deposit with post Office under any notified central government scheme.

(c) Reduction in the rate for deducation of tax at source on rent for the use of any machinery or plant or equipment under Section 194-I to 10% from the earlier 15% or, as the case may be 20%.

(d) Enhancement of the rate of TDS under section 194J, requiring deduction of tax on fees for professional services or feeds for technical services, to 10% from 5%.

(e) Increase in the rate of TDS under section 194H, requiring deduction of tax at source on payment of commission or brokerage, to 10% from the earlier 5%.

II. INDIRECT TAXES

Customs, Union Excise and Service Tax duties are the major sources of Indirect Tax revenue. The revenue for the year 2006-07 (Prov.) in respect of Customs. Union Excise duties and Service Tax are Rs. 86,304/- crore, Rs. 1,18,121/- crore and Rs. 37,482/- crore respectively.

CUSTOMS

I. Peak rate of Ad-valorem Customs duty

As part of continuous process of bringing about a moderate, rational and simplified tax structure, the peak rate of customs duty on non-agricultural products was reduced from 12.5% to 10% in Budget 2007-08 with a few exceptions. Ad-valorem component of customs duty on textiles fabrics and garments was also reduced from 12.5% to 10%. The specific component, however, has been left unchanged. Thus, at present, the two major ad-valorem rates of customs duty are 5% and 10%

II. Other Budgetary Changes

Other major changes introduced in the Budget 2007-08 on Customs tariff are given below :

A. ADDITIONAL DUTY OF CUSTOMS

The following items have been exempted from the prevailing 4% Additional duty of Customs:

a) All edible oils, crude as well as refined.

b) Roasted molybdenum ore and concentrate.

Exemption of the duty to Cell phone parts, components and accessories have been extended till 30.06.2009.

B. METALS AND THEIR INPUTS

Customs duty has been reduced from 20% to 10% on seconds and defectives of Iron and Steel.

C. EXPORT DUTY

Export duty has been imposed on :

a) Iron ores and concentrates, all sorts @ Rs. 300 / - per metric tonne.

b) Chromium ores and concentrates, of all sorts @ Rs. 2000 / - per metric tonne.

D. SECONDARY AND HIGHER EDUCATION CESS

An Education Cess @ 1% has been imposed on total import duties of Customs. The proceeds from this cess shall be utilized to finance secondary and higher education.

E. AIRCRAFTS

Customs duty of 3%, CVD of 16% and SAD of 4% have been imposed on aircrafts and it's parts, which are imported for use in such aircrafts.

Imports by Government and scheduled airlines in this regard, have been exempted from these levies.

Aircraft, not registered in India, which are brought for the purpose of flight to or across India and ultimately removed within six months from the date of arrival are, however, exempted from all duties of customs.

F. CHEMICALS AND PETROCHEMICALS

Customs duty has been reduced from 12.5% to 7.5% on goods falling under Chapter 28 (except Titanium Dioxide), Chapter 29 (except Mannitol, Sorbitol and Caprolacium), Chapter 31, and goods falling under headings 3201 to 3207 (except pigments and preparations based on Titanium Dioxide), 3403, 3801 to 3807, 3809 (with few exceptions), 3810, 3812, 3816, 3817, 3821, 3824 (except 3824 60), 3901 to 3907 and 39909 to 3915, from 30% to 20% on glycerol waters and glycerol lyes, from 10% to 7.5% on Denatured ethyl alcohol and 12.5% to 10% on Titanium Dioxide and pigments and preparations based on Titanium Dioxide.

G. AGRICULTURE

Customs duty has been reduced from 7.5% to 5% on food processing machine and sprinklers and drip irrigation system used for agriculture and hosriculture purposes, from 65% to 50% on crude sunflower oil, from 75% to 60% on refined sunflower oil and from 30% to 20% on Dextrose monohydrate.

Concessional rate of 5% customs duty plus Nil CVD / excise duty presently available to specified plantation machinery upto 30.04.2007, has been extended upto 30.4.2009.

H. TEXTILES

Customs duty has been reduced from 10% to 7.5% on polyester staple fibrers and two, polyester filament years, polyester chips, DMT, PTA and MEG.

I. EXPORT PROMOTION

Customs duty has been reduced from 5% to 3% on cut and polished diamonds, 12.5% to 5% on rough synthetic gemstones and 30% to 10% on un-worked or simply prepared corals, Raw, tanned or dressed fur skins have been exempted from CVD of 8%.

J. RESEARCH & DEVELOPMENT

Present concessional rate of 5% customs duty plus nil CVD on specified items, available to public funded and non-commercial research institutions, has been extended to all

research institutions registered with the Department of Scientific & Industrial Research, subject to certain conditions. The list of the specified items for pharmaceutical and biotechnology sector presently attracting concessional rate of 5% Customs duty, has been extended by including 15 additional items.

K. HEALTH

Customs duty has been reduced from 12.5% to 7.5% on medical equipment.

L. PROJECT IMPORT

Customs duty of 7.5% has been imposed on Digital Cinema Development Projects.

M. MISCELLANEOUS

I. Customs duty has been reduced from 5% to Nil on :
   (a) dredgers
   (b) high ash coking coal

II. Customs duty has been reduced from 10% to 5% on
   a. butyl rubber
   b. borax or boric acid
   c. frit

III. Customs duty has been reduced from 12.5% to 5% on
   (a) Specific ceramic colours
   (b) Watch dials and movements
   (c) Parts of umbrella, including umbrella panels.

IV. Customs duty has been reduced from 5% to 2% on natural baron ore and 30% to 20% on dammar batu and pet food.

V. A uniform customs duty rate of 5% has been prescribed for urea unconditionally.

VI. Aramid yarns for manufacture of bulletproof jackets for supply to armed forces have been exempted from both customs duty and CVD.

N. WITHDRAWAL OF EXEMPTIONS

I. Customs duty exemptions / concessions have been withdrawn on following items:
   a) chemicals, for use in the manufacture of Centchroman;
   b) Codeine phosphate or Nicotine, imported by Government alkaloid factories;
   c) Recorded magnetic tapes for producing TV serials;
   d) Specified goods like TV cameras (professional grade), audio recording equipment, tabletop desk production video machine, 8 channel video mixer / switches etc.;
   e) Specified goods for manufacture of fly ash based goods.

II. CVD / Excise duty exemptions on the following items have been withdrawn:
   a) Cold-set high speed printing machine for newspapers. Such machines will attract excise duty / CVD at 8%.

b) Specified parts of set top boxes.

CENTRAL EXCISE

Budgetary Changes

Major changes introduced in the Budget 2006-07 on Central Excise tariff are given below:

A. SECONDARY AND HIGHER EDUCATION CESS

A Education Cess @ 1% has been imposed on excisable goods manufactured in India. The proceeds from this cess shall be utilized to finance secondary and higher education.

B. RELIEF MEASURES

Excise duty has been fully exception on package biscuits of MRP not exceeding Rs. 50 per kg. food mixes (including instant food mixes), specified water purification devices based on membrane technology, household water filters not using electricity and pressured tap water and biodesels.

Excise duty has been reduced from 16% to 8% on umbrellas, plywood, vencered panels and similar laminated wood, footwear parts falling under heading 6406, wadding and gauze.

C. PETROLEUM

Ad volorem component of excise duty on petrol diesel has been reduced from 8% to 6%.

D. TEXTILES

Excise duty has been reduced from 16% to 12% on caprolactum and nylon chips and benzene for manufacture of caprolactum.

Optional excise duty @ 12% has been prescribed on fishnet grade nylon yarns, fishnet fabrics, fishnet twine and fishnets.

An excise duty of 8% has now been imposed on specified textile machinery, which used to attract nil excuse duty.

E. SMALL SCALE INDUSTRIES

Exemption limit for SSI scheme has been increased from Rs. 1 crore to Rs. 1.5 crore w.e.f. 01.04.2007.

F. RESEARCH AND DEVELOPMENT

Exemption of excise duty has been extended to specific items domestically procured by all research institutions registered with Department of Scientific and Industrial Research, subject to certain conditions.

G. METALS

The rate of compounded levy on aluminium circles has been increased from Rs. 7500 / 10000 per machine per month of Rs. 12000 per machine per month.

H. TOBACOO PRODUCTS

I. Specific rates of total excise duty on cigarettes have been revised as under :

S.No.	Description	Present rate	Proposed rate
	Non-Filter Cigarettes	(Rs. per 1000)	
1.	Not exceeding 60 mm in length	160	168
2.	Exceeding 60 mm but not exceeding 70 mm	520	546
3.	**Filter Cigrettes**	780	819
4.	Not exceeding 70 m in length	1260	1323
5.	Exceeding 70 mm but not exceeding	1675	1759
6.	75 mm	2060	2163
7.	Exceeding 75 mm but not exceeding 85 mm	1150	1208
	Other cigarettes		
	Cigarettes and tobacco substitutes		

II. Specific rates of total excise duty (including cess) on biris have been revised as under:

(a) Biris, other than paper rolled and manufactured without the aid of machines from Rs. 12 to Rs. 16 per thousand.

(b) Other bisris from Rs. 22 to Rs. 29 per thousand.

III. The exemption limit of 20 lakh unbranded biris in a financial year will now be subject to the condition that any person wanting to avail of the exemption has to file a declaration with the Central Excise Department.

IV. Excise duty on pan masala not containing tobacco, falling under 2106, 9020, has been reduced from 66% to 45%. Consequently, the abatement from maximum retail price has been reduced from 50% to 44%.

I. CEMENT

(a) General rate

i) Excise duty has been reduced from Rs. 400 per metric tonne to Rs. 350 per metric tonne for cement of retail sale price not exceeding Rs. 190 per 50 kg. bag or per metric tonne retail sale price equivalent not exceeding Rs. 3800.

ii) Excise duty has been increased from Rs. 400 per metric tonne to Rs. 600 per metric tonne for cement of declared retail sale price not exceeding Rs. 190 per 50 kg. bag or per metric tonne retail sale price equivalent exceeding Rs. 3800.

(b) Mini cement plants

iii) Excise duty has been reduced from Rs. 250 per metric tonne to Rs. 220 per metric tonne for cement of declared retail sale price not exceeding Rs. 190 per 50 kg. bag or per metric tonne retail sale price equivalent not exceeding Rs. 3800.

iv) Excise duty has been increased from Rs. 250per metric tonne to Rs. 370 per emtric tonne for cement of declared retail sale price not exceeding Rs. 190 per 50 kg. Bag or per metric tonne retail sale price equivalent exceeding Rs. 3800.

v) Cement has been included in the Third Scheduled of the Central excise Act to provide that in relation to products of heading 252329, packing or

repacking in unit container, labeling or re-labelling packages, including the declaration or alternation of retail sale price on it or adoption of any other treatment to render the product marketable to the consumer, shall amount to 'manufacture'.

J. INFORMATION TECHNOLOGY

'USB flash memory' and 'DVD drive' were exempt from excise duty. Now the exemption has been extended to 'flash memory' in general and 'DVD drive / DVD writer'.

K. WATER SUPPLY PROJECTS

In addition to the present exemption of excise duty for popes used for taking water from water treatment plant, including it's reservoir, to the first storage point, exemption has now been extended to all pipes of outer diameter exceeding 20 centimeter, when such pipes are integral part of water supply project, irrespective of its use.

L. RETAIL SALE PRICE (RSP) BASED ASSESSMENT

RSP based assessment has been extended to personal computers (including laptop and other portable computers), printers, monitors, computer keyboards, scanners, computer mouse, computer plotter, facsimile machines, modems and set top boxes.

M. WITHDRAWAL OF EXEMPTIONS

I. Excise duty exemptions / concessions on following items have been withdrawn

  a. Chemical reagents manufactured by Hindustan Antibiotics Ltd. For use in manufacture of kits for testing narcotics drugs and psychotropic substances;

  b. Optical glass manufactured by the Centre Glass and Ceramic Research Institute, Calcutta for use by any department of the Central Government.

  c. Goods like brooms, hand operated mechanical floor sweepers, mops, feather dusters, prepared knots and tufts of broom and brush, pain pads and rollers, squeezes etc.

  d. Recorded video cassettes intended for television broadcasting, supplied in formats such as U-matic, Betacam or any similar format;

  e. Nicotine polacrilex tum;

  f. Dust and powder of synthetic stones.

II. Exemption from excise duty on pan masala containing tobacco and other tobacco products manufactured by specified units in the North East Region have been withdrawn.

SERVICE TAX

I. Secondary and Higher Education Cess

A cess of 1% has been imposed on the service tax on the services liable to service tax. The cess paid on input services is available as credit for payment of cess on output services.

II. Other Budgetary Changes

Other major changes introduced in the budget 2007-08 are given below :

A. Following services have been individually specified taxable services.

(1) Telecommunication service (includes various telecommunication related services which are presently specified as separate taxable services);

(2) Services outsoured for mining of mineral, oil or gas;

(3) Services provided in relation to renting of immovable property, other than residential properties and vacant land, for use in the course or furtherance of business or commerce (such services provided by or to a religious body are excluded).

(4) Development and supply of content for use in telecommunication services, advertising agency services and on-line information and database access or retrieval services;

(5) Asset management services including portfolio management and all forms of fund management service provided by any person, except a banking company or a financial institution including a non-banking financial company or any other body corporate or commercial concern;

(6) Design services;

(7) Services provided in relation to the execution of a works contract.

B. Scope of specified taxable services has been amended as follows

1) To include :-

i) sale of space in business directories, yellow pages and trade catalogues which are primarily meant for commercial purposes under sale of space or time for advertisement service;

ii) renting of motor vehicles capable of carrying more than twelve passengers under rent-a-cab service, Motor vehicle or Mexican rented to an educational body, other than a commercial training and coaching centre, will be excluded from the scope of the service;

iii) services provided in relation to marriage functions under man-day keeper service, pandal or shamiana service and event management service;

iv) computer hardware engineering consultancy under consulting engineer's service;

2) To amend,-

i) Banking and other financial services, so as to :

   (a) Substitute the words "any others person" with "commercial concern" in the definition of taxable service;

   (b) Include cash management within its scope; and

   (c) Explain the term "financial leasing";

ii) Management consultant service so as to rename it as management or business consultant service and to include explicitly business consultancy within is scope;

3) To clarify that,-

i) Recruitment or supply of manpower service includes services in relation to:

   a) Pre-recruitment screening

   b) Verifying the credentials and antecedents of the candidate; and

   c) Authenticity of documents submitted by the candidates;

ii) "goods" referred to in management, maintenance or repair service includes computer software.

C. Exemptions from Service Tax

1. The threshold limit of service tax exemption for small service providers is being increased from the present level of Rs. 4 lakh to Rs. 8 lakh.
2. Exemption from service tax is being provided to :-
   i. All taxable services provided by Technology Business Incubators (TBI) / Science and Technology Entrepreneurship Parks (STEP) recognized by National Science and Technology Entrepreneurship Board of Department of Science & Technology also known as "incubators";
   ii. Taxable services provided by an incubate (entrepreneur) whose total business turnover in a year does not exceed Rs. 50 lakh and is located within the premises of an incubator, subject to specific conditions;
   iii. Services provided by resident welfare association to their members, where the monthly contribution of a member does not exceed Rs. 3000/- per month.
   iv. Services provided in relation to delivery of content of cinema in digital form after encryption, electronically;
   v. Technical testing and analysis services provided in relation to testing of new drugs, including vaccines and herbal remedies, on human participants by a Clinical Research Organisation (CRO) approved to conduct clinical trials by the Drugs Controller General of India.

CENTRAL SALES TAX (CST)

The Central Sales Tax is levied under the provisions of the Central Sales Tax Act, 1956 on the sale of goods of the course of inter-State trade or commerce. The Central Sales Tax is levied by the Central Government by virtue of Entry 92A of the Union List, but the same is assigned to the States within which the tax is leviable, by virtue of provisions of Article 269 of the Constitution of India. It is an accepted fact that the CST, being an origin-based tax, is inconsistent with VAT (which is a destination based tax). Moreover, CST is a cascading-type taxd since it is not rebatable against VAT. Hence, it is agreed that CST should be phased out.

In fact, after extensive consultations between the Centre and the States, the roadmap for phasing out the CST by 31.03.2010 (i.e. before the date appointed for introduction of GST) has been finalised. The package of compensation to the States for revenue loss on this account has also been finalised. Accordingly, the process of phasing out of the CST has been started with reduction in CST from 4% to 3% w.e.f. 01.04.2007. It is proposed to reduce the CST further by 1% on 1st April every year.

IV. STATE LEVEL VALUE ADDED TAX (VAT)

Introduction of State VAT is the most significant tax reform measure at State level. The State VAT has replaced the earlier Sales Tax systems of the States. VAT, being a 'tax on sale or purchase of goods within a State' is a State subject, is a State Subject by virtue of Entry 54 of List II (State List) of the Seventh Schedule of the Constitution of India. The Government of India has constituted an Empowered Committee of State Finance Ministers (EC) to deliberate upon and decide all issues concerning Sales Tax Reforms / State VAT. The State VAT has been introduced by all the States / UTs except Uttar Pradesh.

Since Sales Tax / VAT is a State subject, the Central Government has been playing the role of a facilitator for successful implementation of VAT. Some of the steps taken by the Central Government in this regard are as follows :

a) A package for payment of compensation to States for any revenue loss on account of introduction of VAT has been implemented.

b) Technical and financial support is being provided to North Eastern / Special-category States to enable them to take up VAT computerisation.

c) Financial support has been provided to the Empowered Committee as well as the States for undertaking VAT related publicity and awareness campaigns.

d) 50% funding is being provided to the EC for implementation of the TINXSYS Project for tracking of inter-State transactions.

The experience with implementation of VAT has been very encouraging so far. The new System has been received well by all the stake-holders. The transition to the new system has been quite smooth. The provisional tax revenues of VAT implementing States registered an increase of 13.8% during 2005-06 and about 21% during 2006-07.

Indian Stamp Act, 1899

A High level Expert Committee on Corporate Bonds and Securitisation (under Chairmanship of Dr. R.H. Patil, Chairman, UTI) was constituted. The Committee has recommended for rationalization of certain instrument under Indian Stamp Act, 1899 namely Debentures (Article 27), Bonds in the nature of Promissory Notes (Article 49) and Assignment etc. The recommendations of the Committee have been accepted by the State Governments in the meeting of Standing Committee of State Secretaries on Stamps and Registration held on 11.05.2007 at NIPFP. The new rates on these instruments are in the process of Notification.

V. Goods and Services Tax (GST)

Goods and Services Tax (GST) means taxation of goods and services in an integrated manner, and not separately as is being done now. The line of demarcation between goods and services is getting blurred, which has made separate taxation of goods and services untenable. Integrated Goods & Service Ta (GST), based on VAT principles, has evolved as the most modern and efficient form of indirect taxation and the same has been adopted by a large number of countries (including Federal countries) around the world. Even in European countries, coverage of VAT includes both goods and services. In India also, the process of indirect taxation has been evolving on the lines of VAT and introduction of an integrated GST would be the natural culmination of the tax reform efforts of last about two decades.

The Central Government has set 01.04.2010 as the target date for introduction of GSI. Since introduction of GST would involve restructuring of Central as well as State Taxes, the process of introduction of GST essentially acquires extensive process of consultation between the Centre and the States. It has been decided that the Empowered Committee of State Finance Ministers (EC) shall work with the Central Government of finanlse the roadmap for introduction of GST by 01.04.2010. The EC has constituted, in May 2007, a Joint Working Group (JWG) consisting of officers of Central and State Governments to examine various models and options for GST and to give their assessment of the same of the EC within 4 months.

VI. OPIUM CULTIVATION

India is the sole licit producer and exporter of opium gum in the world market. Other countries which grow opium follow the Concentrate of Poppy Straw (CPS) method.

Cultivation of opium poppy through licences issued by the Central Bureau of Narcotics (CBN), and Export of opium are under the exclusive control of the Central Government. The Central Bureau of Narcotics, headed by the Narcotics Commissioner, is the designated agency to supervise the licit production of opium in the notified tracts of the three States namely Madhya Pradesh, Rajasthan and Uttar Pradesh. During the Crop year 2006-07, Commencing from 1st October, 206 and ending on 30th September, 2007, an area of 5913 hectares was harvested for opium poppy cultivation by 60232 cultivators. 269 metric tones of opium at 90 degree consistance (346 metric tones of opium at 70 degree consistence) was procured in April, 2007.

The Central Bureau of Narcotics has also initiated a Smart Card Project to streamline and digitize opium cultivation data through micro-processor chip based cards. The project is now at the advanced stage. The reports have started generating on trial basis through the System at the Divisional level.

During the Financial Year 2006-07 (upto 31st March, 2007), 342.631 MT opium (from the crop year 2005-06) was received at 90 degree consistence, 340 MT opium dried and 495 (Physical weight) MT opium exported.

The production / sale, etc., in respect of Alkalods manufactured during 2005-06 in the Government Opium and Alkaloid Works, Ghazipur and Neemuch is tabulated as under:

Name of the Alkaloid	Opening Stock (Qty. in Kg.)	Production in (Qty. in Kg.)	Sales (Qty. in Kg.)	Sales Amount (Rs. / lakh)
1. Codeine Phosphat - Indigenous	2525	10498	12628	4167.14
2. Codeine Phosphate - Import	550	5000	5550	1831.46
3. Codeine Sulphate	38	510	530	214.60
4. Thebaine	369	643	400	170.00
5. Morphine Salts	58	215	235	106.42
6. Dionine I.P.	19	545	564	236.66
7 Noscapine	412	3217	2842	972.88
8. S.R. Papaverine	974	1321	881	4.00
9. Value Added Product	13	213	215	81.27
10. IMO Powder	4342	3600	5820	223.46
11. IMO Cake	397	1551	1787	64.51

DIRECTORATE OF ENFORCEMENT

The Directorate of Enforcement is mainly concerned with the enforcement of the Foreign Exchange Management Act (FEMA), 1999. The Directorate is also responsible for adjudication of cases and follow-up of complaints registered under the erstwhile Foreign Exchange Regulation Act (FERA), 1973. This Directorate has also been entrusted with the implementation of Prevention of Money Laundering Act (PMLA), 2002 which has come into force with effect 01 July 2005.

The Directorate collects intelligence from different sources, and investigates and adjudicates the cases under FEMA. During the year 2006-2007, the Directorate conducted 76 searches in which it seized Rs. 868.89 lakh in Indian currency and

foreign currencies equivalent to Rs. 11.16 lakh. The Directorate recovered penalties of Rs. 129.20 lakhs under FEMA and Rs. 715.36 lakh under FERA respectively during 2006-07. Besides, the Directorate confiscated Rs. 24.54 lakh of Indian currency as well as foreign currency equivalent to Rs. 06.39 lakh under FERA and Rs. 85.45 lakh of Indian currency as well as foreign currency equivalent to Rs. 06.39 lakh under FERA and Rs. 85.45 lakh of Indian currency as well as foreign currencies equivalent to Rs. 09.25 lakh under FEMA during the year. The Directorate adjudicated 140 FERA cases and 393 FEMA cases during the year.

Besides, investigations have been initiated in 34 cases under the previsions of Prevention of Money Laundering Act (PMLA), 2002 for money laundering offences relating to waging war against the country, drug offences under NDPS Act, IPC Officences like forgery of valuation security / counterfeit currency etc. offences under Arms Act / Wild Life (Protection) Act / Immoral Traffic (Prevention) Act. In 29 matters, regular cases have been registered. Preliminary enquiries have been initiated in remaining 5 matters.

Combating tax evasion : The Income Tax Department is taking necessary legislative and administrative steps from time to time to curb / control black money and is also striving to check tax evasion and accumulation of unaccounted wealth. In pursuance of this objective, systematic search and seizure operations, verification of information by Central Information Branches in a planned manner and scrutiny of selected cases, are undertaken. Persons found to be indulging in tax evasion are dealt with severely by imposing penalties and by launching prosecution proceedings against them. Results achieved on searches and statistics for prosecution launched since F.Y.2002-2003 are as under:

RESULT OF SEARCHES

(Rs in crore)

Year	No. of Warrants	Value of assets seized
2002-2003	4902	515.87
2003-2004	2492	231.37
2004-2005	2377	202.28
2005-2006	3364	351.69
2006-2007*	3534	364.64

STATISTICS FOR PROSECUTION

Year	No. of Prosecution proceedings launched	No. of proceedings decided	No. of proceedings where conviction obtained	No. of proceedings compounded	No. of proceedings acquitted
2002-2003	102	433	18	11	404
2003-2004	37	115	12	55	48
2004-2005	103	350	1	262	87
2005-2006	326	125	1	85	39
2006-2007*	71	69	1	40	28

* Provisional.

ANTI-SMUGGLING DRIVE

Smuggling has been as old as international trade due to tariff and non-tariff barriers. Till about a decade ago high tariff and non-tariff barriers on most commodities encouraged smuggling into India of various items favoured by consumers in the country. With the process of economic liberalisation gathering momentum, major changes have been noticed in the inventory of commodities prone to smuggling, sectors used and modus operandi adopted by the economic offenders.

As a result of various measures taken by the Government including allowing legal import of gold on payment of concessional rate of duty, smuggling of gold has come down. Silver also seems to have lost its sheen. Smuggling in of narcotics drugs, yarn / fabrics, ball bearings, computer parts, electronic goods like mobile-phones, digital cameras, PDAs, MP3 players and variety of consumer items was, however, noticed during the year under report. Smuggling of foreign currency out of the country also continued mainly through baggage mode.

Details of goods seized and customs duty evasion cases detected by the field formations of the Customs Department including Directorate of Revenue Intelligence during the last 4 years are as follows:

(Value Rs in Crore)

Year	Seizure Value	Customs Duty Evasion Cases
2003-2004	611.56	1093.05
2004-2005	859.30	1080.40
2005-2006	288.29	468.65
2006-2007	377.88	748.05

Details of persons arrested, prosecuted, convicted under the Customs Act and detained under COFEPOSA Act and PITNDPS Act during the last four years are as follows :

Year	Action taken against persons under the Customs Act, 1962			Action taken against persons under COFFPOSA Act	Action taken against persons under PITNDPS Act
	Arrested	Prosecuted	Convicted	Persons detained	Persons detained
2003-04	433	125	66	38	34
2004-05	334	112	44	11	07
2005-06	113	031	04	57	03
2006-07	201	32	04	51	03

Persons found to be indulging in tax evasion are dealt with severely by imposing penalties and by launching prosecution proceedings against them. Results achieved on searches and statistics for prosecution launched since F.Y. 2001-2002 are as under:

RESULTS OF SEARCHES

(Value Rs in Crore)

Year	No. of Warrants	Value of assets seized
2001-02	4358	344.33
2002-03	4902	515.87

2003-04	2492	231.37
2004-05	2377	202.28
2005-06	704	199.39
2006-07	1054	153.76

STATISTICS FOR PROSECUTION

Year	No. of Prosecution proceedings / launched	No. of proceedings	No. of proceedings where conviction obtained	No. of proceedings Comounded	No. of proceedings acquitted
2001-02	38	212	5	8	199
2002-03	102	433	18	11	404
2003-04	37	115	12	55	48
2004-05	103	350	1	262	87
2005-06	53	34	22	03	02
2006-07	45	127	13	01	08

Government Opium and Alkaloid Works : The Government Opium and Alkaloid Factories (GOAF), under the administrative control of the Ministry of Finance, Department of Revenue, are engaged in the processing of raw opium for export purposes and manufacture of opiate alkaloids. The organisation is headed by the Chief Controller of Factories (CCF).

There are two units of the Government Opium and Alkaloid Factories viz. Government Opium and Alkaloid Works (GOAW), Ghazipur (Uttar Pradesh) and GOAW, Neemuch (Madhya Pradesh). Each of these units has an Opium Factory as well as an Alkaloid Plant. The Opium Factories are mainly concerned with the receipt of opium from field, its storage and custody, drying and packing for export. The Alkaloid Plants are engaged in processing of raw opium into alkaloids of pharmaceutical grades to cater the domestic demand of the pharmaceutical industry. The manufacture and sale of opium and its alkaloids in India is presently under the sole control of the Central Government through the GOAF.

FORFEITURE OF ILLEGALLY ACQUIRED PROPERTY

The Smugglers and Foreign Exchange Manipulators (Forfeiture of Property) Act, 1976 [SAFEM(FOP)A], provides for forfeiture of illegally acquired property of the persons convicted under the Sea Customs Act, 1878, the Customs Act, 1962 and the Foreign Exchange Regulation Act, 1973 and the persons detained under the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974. The Narcotics Drugs and Psychotropic Substances Act, 1985 [NDPS Act] provides for tracing, freezing, seizure and forfeiture of illegally acquired property of persons convicted under this Act or any corresponding law of any foreign country and those who are detained under the Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act, 1988 and Jammu & Kashmir Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act, 1988.

SAFEM(FOP)A and NDPS Acts provide for appointment of Competent Authorities for carrying out forfeiture of illegally acquired properties. At present, the Offices of Competent Authorities are located at Kolkata, Chennai, Delhi, Mumbai.

During the year 2006-2007 (upto March, 2007), the Competent Authorities have forfeited property worth Rs 573 crore in 11 cases.

MINISTRY OF CORPORATE AFFAIRS

Ministry of Corporate Affairs is extending its efforts to meet the expectations of the Corporate Sector and its stakeholders in the changing national and global business environment though a number of initiatives to bring about 'Good Governance'. These initiatives aim at improvement in the legislative framework and administrative set up to enable easy incorporation and exit of the companies, convenient compliance of regulations with transparency and accountability in corporate governance.

The role of the Ministry which was traditionally confined to the administration of the Companies Act, 1956, has undergone a significant change in the current environment and has expanded to cover different aspects of the working of the corporate sector as a whole. The Ministry, at present, isengaged in a number of initiatives for the reform of the statutory framework applicable to the corporate sector in India. In addition to the Companies Act, 1956; three professions of Chartered Accountants, Cost & Works Accountants and Company Secretaries; Accounting Stanards; MRTPC; Competition Act, 2002; the Ministry also undertakes generic issues like Good Corporate Governance Practices and the legal framework for Limited Liability Partnership. Hence, to fully reflect the nature of its functions and responsibilities, the name of the ''Ministry of Company Affairs'' has been changed to ''Ministry of Corporate Affairs''. Internationally also, the expression ''Corporate Affairs'' has greater acceptance and comprehension with reference to the responsibilities of this Ministry.

With the new name, the Ministry has also defined its new vision which reads as under :

"To be a leader and partner in initiatives for corporate reforms, good governance and enlightened regulation, with a view topromote and facilitate effective corporate functioning and investor protection.''

A great deal of attention has been paid to the aspects of delivery of services and development of sound monitoring mechanisms. Implementation of MCA21 project has also helped in strengthening the public information system, as all company documents in the public domain are now available for publicview online on payment of the prescribed statutory fees. The Ministry is fully geared to carry further the various initiatives and Programmes on a continuing basis, of which major are summarized below :

Statutory Reforms

The Ministry has been working on wide ranging reforms in the statutory framework relating to the corporate sector. Some of the major initiatives taken in this direction are as under :

i. Comprehensive revision of the Companies Act : A comprehensive revision of Companies Act, 1956 has been taken up in order to bring the law in tune with the changing requirements. The exercise was started with the preparation of the Concept Paper and its dissemination on the website of the Ministry to seek public comment, followed by constitution of an Expert Group headed by Dr J J Irani and consisting of representatives from corporate, industry bodies and professionals. Based on the inputs received from various segments, a draft Companies Bill prepared in consultation with the Ministry of Law & Justice will be introduced in the Parliament after requisite approvals. The new compact law would focus on shareholder democracy, a

disclosure based regime, rational penal provisions with built-in required deterrence and sufficient protection of the interests of investors.

ii. Legal framework for Limited Liability Partnerships : Keeping in view the vast potential for the growth of knowledge and services sector in the country, the Ministry has prepared a new legislative framework enabling the creation of Limited Liability Partnerships as a new corporate form. The Limited Liability Partnership Bill, 2006 has been introduced in the Parliament in December, 2006. The Bill stands referred to the Department Related Parliamentary Standing Committee on Finance.

iii. Competition Act (Amendment) Bill, 2006: India has responded to the current trend of globlization by opening its economy, removing controls and moving to a more liberal regime. As a natural corollary, it was felt that the Indian market should be geared to face competition, from within the country and outside. While competition in the market has significant benefits by way of increased economic efficiency and consumer welfare, however, there is need to guard against market failures. The common market failures arise out of anticompetitive agreements like cartel formation; abuse of dominant position like predatory pricing, vertical restraints like exclusive supply or distribution arrangements and mergers to exercise monopoly power. With a view to prohibit and regulate such action, the Government enacted the Competition Act, 2002 and the Competition Commission of India was set up which would ultimately replace the Monopolies and Restrictive Trade Practices Commission (MRTPC).

The Competition Act, 2002 was challenged in the Supreme Court by way of a Public Litigation (PIL) petition. In the light of the judgment of the Supreme court, the government introduced an amendment Bill to the existing Competition Act in the Parliament. The Competition (Amendment) Bill 2007 was passed by the Lok Sabha and Rajya Sabha and after receiving the assent of the President has been published in the Gazette of India.

iv. Accounting Standards : The National Advisory Committee on Accounting Standards (NACAS) constituted under section-210A of the Companies Act, 1956 has recommended Accounting Standards 1-29 (except AS 8 which has been merged with AS 26) for prescribing under the Act. These Accounting Standards were examined in consultation with Ministry of Law and have been prescribed under the Companies Act, 1956 through notification number GSR 739(E), dated 7th December, 2006. The new Accounting Standards incorporate the internationally accepted practices and the implementation there of would bring the Indian Accounting systems largely conforming to the international accounting standards.

MAJOR PROGRAMMES OF THE MINISTRY

• MCA21 e-Governance Project

MCA21 is an e-governance programme initiated by MCA, aiming to provide an easy and secure access to MCA services in anywhere - anytime mode. The project isnamed as MCA21 as it aims at fulfilling the aspirations of its stakeholders in the 21st century. Rather than compelling the business community to physically travel to MCA offices, MCA services are available via internet at the place of their choice, be it their homes or offices.

The project isdesigned to fully automate all processes related to the proactive enforcement and compliance of the legal requirements under the companies Act, 1956. This has significantly helped the business community in meeting their statu-

tory obligations. MCA portal is the single point of contact for all MCA related services, which can be easily accessed over the internet by all users.

The Project was initially launched at Coimbatore as a Pilot on February 18, 2006. Hon'ble Prime Minister of India launched the second Pilot at Delhi on March 18, 2006. There after, the project was launched in a progressive manner and the nation-wide roll-out was completed across all the Offices of 20 Registrars of Companies on September 4, 2006. The Government has mandated electronic filling by the companies from September 16, 2006.

To ensure security and authenticity of fillings in electronic mode, use of Digital Signatures by the persons, specified under the Act and Rules made there under, has be enintroduced to file the documents on behalf of the company.

To ensure the integrity of the documents filed under e-filling system, a 'role check' function has been implemented since 1st July, 2007. This implies if the e-form is not digitally signed by authorized person, then it shall not be accepted on MCA21 portal. It would ensure a systematic varification of the identity of the authorized signatory using MCA21 data base. The check is functional for Director, Signatory (Manager / Secretary) and practicing professional. The Stake holders have been advised tor egister their DSCs on MCA21 portal. A media campaign has been launched to inform the stakeholders about this process.

A major drive has been taken up to clean, correct and vaildate the database which has been built up progressively due to e-filing being mandated and transfer of legacy documents forming a part of electronic registry.

A protocol has also been finalized to provide access to MCA21 database to some of the investigating agencies / Government Ministries / Departments through the use of digital signature. With this provision, these agencies / ministries / departments would be able to access company documents without any charge.

- **Investor Education and Protection Fund**

To protect investors' interests and promote investor awareness, the Ministry has established the Investor Education and protection Fund (IEPF) with effect from 1st October, 2001 under sub-section (1) of Section 205C of the Companies Act 1956. Various programmes on investor education and awareness have been organized through NGOs / Societies / Associations / Institutions etc. With support under the IEPF. The Ministry has been organizing media campaigns through electronic and print media on a continuous basis to increase investor awareness. A website namely, www.watchoutinvestor.com has been sponsored under the IEPF to help the investors protect themselves from unscrupulous promoters, companies and entities.

Another project namely "Investor Helpline" (www.investorhelpline.in) has been launched under IEPF through Midas Touch Investors Association to provide a mechanism for redressal of investor grievances. Public notices showing details of vanishing companies were published in the newspapers requesting public to forward their complaints so as to strengthen the prosecution cases launched against these companies and their promoters / directors by the State Police Authorities.

The Ministry observed September 2007 as 'Investor Awareness Month' as part of a series of initiatives for Investor education. A number of programmes were organized on investor education and awareness, in collaboration with Institute of Chartered Accountants of India Institute of Company Secretaries of India etc at 61 locations across the country. A website (www.iepf.gov.in) for Investor Education & Pro-

tection Fund (IEPF) was launched by the Hon'ble Minister of Corporate Affairs on September 27, 2007.

- **Serious Frauds Investigation Office (SFIO)s**

The Government set up a Serious Frauds Investigation Office (SFIO), a multi-disciplinary investigating organization, to investigate financial frauds. The Serious Fraud Investigation Office (SFIO) investigates cases of financial fraud characterized by :

(a) Complexity and having inter-departmental and multi disciplinary ramifications;

(b) Substantial invelvement of public interest to be judged by size, either in terms of monetary misappropriation (of about Rs. 50.00 crore) or in terms of persons affected, and

(c) The possibility of investigation leading to or contributing towards a clear improvement in systems, laws or procedures. SFIO carries out the investigations under the provisions of the Companies Act, 1956.

- **Corporate Governance**

The Ministry of Corporate Affairs has set up National Foundation for Corporate Governance (NFCG) in association with the Confederation of Indian Industries (CII), the Institute of Chartered Accountants of India (ICAI) and the Institute of Company Secretaries of India (ICSI) as a not-for-profit Trust to provide a platform to deliberate on issues relating to goo corporate governance and to sensitize corporate leaers on the importance of good corporate governance practices, to facilitate exchange of experiences and ieas between corporate leaders, policy makers, regulators, law enforcing agencies and non-government organizations.

The NFCG has a three-tier structure for its management, viz, the Governing Council under the Chairmanship of Minister of Corporate Affairs, the Board of Trustees and the Executive Directorate.

The NFCG has framed an action plan on development of good corporate governance pricciples onidentified themes like corporate governance norms for institutional investors, corporate governance norms for independent Directors and corporate governance norms for Audit. NFCG intends to take uptheissue of corporate social responsibility (CSR), encourage corporate governance in South Asia particularly SAARC countries and dissemination of corporate governance practices for small and medium corporate.

A National Conclave was organised by the National Foundation for Corporate Governance on the me entitled "Corporate Governance in India: Tranforming Business Environment" on 30th July, 2007. It was attended by various industrialists, stake holders, business leaders and professionals. the prime focus of this initiative was to highlihts the ''Partnership Approach'' with stake holders which has been the hallmark of various initiatives undertaken by the Government in the last couple of years.

- **Indian Institute of Corporate Affairs (IICA)**

The Ministry of Corporate Affairs proposes to establish an Indian Institute of Corporate Affairs (IICA) to provide policy research and knowledge support to the Ministry on an on-going basis and serve as a think tank and implementation arm for various initiatives of the Ministry. The IICA is envisaged to develop strong institutional link-

ages with national and international institutions besides providing support for capacity building for the officials of the Ministry with provision for a training academy for the members of the Indian Company Law Service (ICLS) and the subordinate cadres of the Ministry. The proposal has been included in the Eleventh Five Year Plan. Anoutlay for an amount of Rs. 47.00 crore has been proposed in thePlan Budget of the Ministry for the FY 2007-08.

- **Indo-UK cooperation**

To strengthen the cooperation between India and UK on corporate matters, the first meeting of the Indo-UK Task Force on Corporate affairs was held on 1st August, 2007. The task force deliberated and agreed on the following areas of cooperation :

- Regulatory and statutory issues including Company Law, Partnership Law, Competition Law, Regulation of accountancy Profession and enhancing competitiveness;
- Corporate Governance;
- Corporate Social Responsibility;
- Law Standards in Financial Profession;
- Insolvency;
- International co-operation, capacity building and best practices; and
- Investor Protection and Electronic registry Services.

14 Food and Civil Supplies

THE Department of Food and Public Distribution is responsible for the management of the food economy of the nation. It undertakes various activities, such as their storage, movement and delivery to the distributing agencies. A close watch is kept on production and efforts are made to ensure their adequate availability at reasonable prices in different parts of the country. The details of production of foodgrains may be seen below.

PRODUCTION OF FOODGRAINS

(lakh tonnes)

Crop	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07*
Rice	817.3	825.4	860.8	896.8	849.8	933.4	718.2	885.3	853.1	917.9	910.5
Wheat	693.5	663.5	712.9	763.7	696.8	727.7	657.6	721.5	720.0	693.5	737.0
Coarse Cereals	341.1	304.0	313.3	303.4	310.8	333.7	260.7	376.0	339.2	346.7	329.2
Pulses	142.5	129.7	149.1	134.1	110.7	133.7	111.3	149.1	133.8	133.9	141.1
Total	1,994.4	1,922.6	2,036.1	2,098.0	1,968.1	2,128.5	1747.8	2131.9	2046.1	2092.0	2117.8

* as per 3rd advanced estimates as on 04-04-2007

PROCUREMENT OF FOODGRAINS

(lakh Tonnes)

Marketing Season	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Rice[1]	155.91	125.99	182.28	212.81	221.27	164.10	228.28	217.93	276.56	226.71*	-
Wheat[2]	92.97	126.52	141.44	163.55	206.30	190.54	158.01	165.95	147.85	92.26	103.3*

[1] Marketing Season : October-September
[2] Marketing Season : April-March
@ As on 29-05-2007

ESSENTIAL COMMODITIES ACT, 1955

The Essential Commodities Act, 1955 was enacted to ensure the easy availability of essential commodities to consumers and to protect them from exploitation by unscrupulous traders. The Act provides for the regulation and control of production, distribution and pricing of commodities which are declared as essential for maintaining or increasing supplies or for securing their equitable distribution and availability at fair prices. Exercising powers under the Act, various Ministries/ Departments of the Central Government and under the delegated powers, the State Governments/UT Administrations have issued Control Orders for regulating production, distribution, pricing and other aspects of trading in respect of the commodities declared as essential.

As per the decisions of Conference of Chief Ministers held on 21 May 2001, a Group of Ministers and Chief Ministers had been constituted which recommended

that the regulatory mechanism under the Essential Commodities Act, 1955 should be phased out. Accordingly, the restrictions like licensing requirement, stock limits and movement restrictions have been removed from almost all agricultural commodities. A total of 227 control orders issued under the Essential Commodities Act, 1955, are in operation at present, of which 31 are by Central Ministries and the remaining 196 are by the State Governments. The enforcement / implementation of the provisions of the Essential Commodities Act, 1955 lies with the State Governments and UT Administrations.

The list of essential commodities has been reviewed from time to time with reference to the production and supply of these commodities and in the light of economic liberalisation in consultation with the concerned Ministries / Departments administering these commodities. The Central Government is consistently following the policy of removing all unnecessary restrictions on movement of goods across the State boundaries as part of the process of globalisation simultaneously with the pruning of the list of essential commodities under the said Act to promote consumer interest and free trade. The number of essential commodities which stood at 70 in the year 1989 has been brought down to 15 at present through such periodic reviews.

Further, in conformity with the policy of the Government towards economic liberalisation, Department of Consumer Affairs is committed to the development of agriculture and trade by removing unnecessary controls and restrictions to achieve a single Indian Common Market across the country for both manufactured and agricultural produce and to encourage linkage between agriculture and industry. With this object in view, this Department introduced the Essential Commodities (Amendment) Bill, 2005 in the Parliament in the Winter Session, 2005 to enable the Central Government to prune the list of the essential commodities to the minimum by deleting all such commodities which have no relevance in the context of present improved demand and supply position and to facilitate free trade and commerce. Only those commodities considered essential to protect the interest of the farmers and the large section of the people "below the poverty line" are proposed to be retained under the Essential Commodities Act, 1955.

The Prevention of Black-marketing and Maintenance of Supplies of Essential Commodities Act, 1980 is being implemented by the State Governments / UT Administrations for the prevention of unethical trade practices like hoarding and black-marketing, etc. The Act empowers the Central and State Governments to detain persons whose activities are found to be prejudicial to the maintenance of supplies of commodities essential to the community. Detentions are made by the States / UTs in selective cases to prevent hoarding and black-marketing of the essential commodities. As per reports received from the State Governments, 161 detention orders were issued under the Act during the year 2006. The Central Government and the State Governments also have the power to modify or revoke the detention orders. The representations made by or on behalf of the persons ordered for detention are considered and decided by the Central Government. Representations received from 28 detenues were considered and decided by the Central Government during the year 2006.

Keeping in view the prevailing price situation, the Central Government had issued a Central Order dated 29.08.2006 under the Essential Commodities Act, 1955 to enable the State Governments to invoke stock limits in respect of wheat and pulses for a period of six months. By virtue of this Order, the State Governments / UT Administrations have been empowered to take effective action to bring out the

hoarded stock of these items to ensure their availability to the common people at reasonable prices. Central Government have on 27.02.2007 extended the validity of the Central Order by another six months with effect from 01.03.2007.

CONSUMER CO-OPERATIVES

The consumer co-operative structure in the country has four tiers, with the National Co-operative Consumers Federation of India Ltd. (NCCF) at the national level. Thirty State Co-operative Consumers Organisations are affiliated to the NCCF. At the Central / Wholesale level, there are 800 Consumer Co-operative Stores. At the primary level, there are 21,903 primary stores. In the rural areas, there are about 44,418 village level Primary Agricultural Credit Societies and Marketing Societies undertaking the distribution of consumer goods along with their normal business. In the urban and semi-urban areas, the consumer co-operative societies are operating about 37,226 retail outlets to meet the requirements of the consumers. The NCCF besides undertaking distribution of consumer articles, also has a Consultancy and Promotional Cell for strengthening consumer co-operative societies engaged in the retailing activities. The NCCF with its Head Office at New Delhi, has 34 branches / sub-branches located in various parts of the country. The sales turnover achieved by the NCCF during the year 2006-2007 was Rs. 411.12 crore as against the sales turnover of Rs 630.39 crore last year. It has earned a net profit of Rs. 1.33 crore as against the profit of Rs. 6.32 crore during the previous year. The accumulated losses of the NCCF as on 31 March 2007 stand tentatively at Rs. 1.12 crore.

FORWARD TRADING AND FORWARD MARKETS COMMISSION

Forward Markets Commission (FMC) is a statutory body set up under Forward Contracts (Regulation) Act, 1952 and functions under the administrative control of the Ministry of Consumer Affairs, Food and Public Distribution. The FMC regulates forward markets in commodities through the recognised associations, recommends to the Government the grant / withdrawal of recognition to the associations organising forward trading in commodities and makes recommendations for the general improvement of the functioning of forward markets in the country.

At present there are 24 exchanges including three ‘national level’ Exchanges which have been recognised for conducting futures / forward trading in India and all the commodities have been permitted for trading. Recently, a few non-conventional commodities like Crude oil, Polymers, Electricity, etc., have also been brought under the purview of Section 15 of the Forward Contracts (Regulation) Act, 1952.

In tune with the liberalisation of the commodity markets in India, all the operational exchanges have been persuaded to implement various reforms such as online trading, time stamping, trade guarantee and settlement mechanism, one-third independent board representation, and back-office automation. In addition to the setting up of the nation wide multi commodity exchanges, there are a number of ancillary areas, which are being looked at for the orderly and harmonious development of the commodity derivatives market. This includes removing a host of controls on movement, prices, etc. on commodities, sorting out certain tax related issues, standardisation, certification and warehousing issues, the usage of warehouse receipts, participation by diverse groups of players, banks, FIs and FIIs and so on. The Government is simultaneously making efforts in all these directions.

The Department has proposed to amend the FCR Act, 1952 to include some new features that are in tune with the latest development in the commodity futures

market. The basic objective of the amendments is to strengthen the regulatory mechanism of commodity derivatives trading by removing the ban on options and providing for its regulation, by registering brokers, by strengthening the FMC, by widening the definition of goods, by increasing the number of members of the Commission from 4 to 9, by granting freedom to the Commission to recruit manpower, by creating FMC General Fund, and by designating Securities Appellate Tribunal (SAT) as appellate authority for the purposes of Forward Contracts (Regulation) Act, 1952. The Bill has already been introduced in the Parliament.

The liberalisation and opening up of commodities futures market has started showing results in terms of significant jump in the volume and value of futures trading in commodities. The value of trading in all the commodities has increased from Rs. 68,276 crore in 2002-03 to Rs. 1,29,363.68 crore in 2003-04 and it reached Rs. 5,71,756 crore in 2004-05. During the year 2005-06 the trade value crossed Rs. 21.34 lakh crore mark. During the year 2006-07 the turnover further increased to 36.76 lakh crore mark.

THE CONSUMER PROTECTION ACT, 1986

Protecting the interests of consumers has become one of the major concerns of Government. Policies have been designed and legislations enacted to protect the interests of the consumers and grant them the rights of choice, safety, information and redressal. A separate Department of Consumer Affairs was created in the Central Government in the year 1997 to act as the nodal Department to exclusively focus on protecting the rights of consumers including redressal of consumer grievances as well as to promote standards of goods and services, etc. On the request of the Central Government, some State Governments have created separate Departments / Directorates of Consumer Affairs and, wherever it has not been feasible to do this, at least the name of the Departments has been changed to include Consumer Affairs / Consumer Protection for the knowledge of the general public. The Central Government has very recently requested all the States / UTs to establish a separate Department with full fledged Secretary so that the consumer protection programme gets exclusive attention for protecting and promoting the welfare of consumers.

One of the most important milestones in the consumer movement in the country has been the enactment of the Consumer Protection Act, 1986. This Act was necessitated because the well organised sectors of manufacturers, traders and service providers, armed with knowledge of the market and manipulative skills, often attempt to exploit the consumers, despite the existence of provisions in different laws protecting the consumers' interests. Moreover, various factors including increase in the population had resulted in enormous pendency and delay in disposal of cases in the civil courts, causing consumers to wait for years for settlement of even small claims. Hence, the Consumer Protection Act was enacted to better protect the interest of the consumers. It is one of the most progressive and comprehensive pieces of legislation covering all goods and services.

The Salient Features of the Act are as under : (a) The Act provides for establishing a three-tier consumer dispute redressal machinery at the national, state and district levels. (b) It applies to all goods and services. (c) It covers all sectors, whether private, public or co-operative including any person. (d) The Act provides for relief of a specific nature and also for compensation to the consumer as appropriate. (e) The Act also provides for setting up of a Consumer protection Council at the Central, State, District level, which is an advisory body to promote and protect the rights of

the consumers. (f) The provisions of the Act are in addition to and not in derogation of the provisions of any other law for the time being in force.

Under the Consumer Protection Act, 1986, the responsibility for setting up of the National Commission rests with the Central Government. The responsibility for setting up of the State Commissions and District Fora and to ensure their effective functioning lies with the State Governments / UTs Administrations.

In terms of the Consumer Protection Act, Consumer Disputes Redressal Agencies have been set up at the district level (600) State level (35) and National level to provide simple, inexpensive and time bound justice to the consumer complaints against defective goods, deficient services including the unfair trade practices adopted by the traders or any person. States have been empowered to establish additional District Fora in the same District. States can also establish additional benches of the State Commissions and also notify places to hold circuit benches. The Central Government set up the National Commission in 1988 at New Delhi. The Act empowers appointment of additional Members of the National Commission for creation of additional benches as also for holding of circuit benches by the National Commission to bring justice to the doorstep of the consumers. At present, 3 benches are functioning in the National Commission.

The Consumer Protection Rules, 1987 and the Consumer Protection Regulations, 2005 have been framed to give effect to the provisions of the Act, make them more explicit as also to further simplify the procedures with a view to serving better the interests of the aggrieved consumers. 24,81,830 cases have been disposed of out of 28,43,735 cases filed in the three-tier redressal agencies which is remarkable as it gives a disposal rate of above 87.85% more precisely. Since their inception and for the period up to April 2007, 47,110 cases were filed in the National Commission out of which 38,156 cases have been disposed of; 9,07,177 cases filed and 2,92,488 cases disposed of by the State Commissions; and 23,94,448 cases filed and 21,67,539 cases were disposed of before the District Fora.

CONSUMER WELFARE FUND

Creation of Consumer Welfare Funds in States / UTs : After closure of all the earlier schemes of funding by this Department viz. Consumer Awareness, Jagriti Shivir Yojana and District Consumer Information Centre, the State Governments and Union Territory Administrations have been impressed upon to create their own Consumer Welfare Funds. For strengthening financial support, the ratio of amount of seed money to be provided to the States / UTs has been increased from 1:10 to 50:50 (Centre: State). This ratio has further been enhanced to 90:10 in the case of 13 special category States as per decision taken in the 39th CWF Standing Committee meeting. So far, the State level Consumer Welfare Funds have been created in the States of Andhra Pradesh, West Bengal, Gujarat, Rajasthan, Orissa, Karnataka, Tripura, Sikkim, Maharashtra, Punjab, Uttar Pradesh, Jammu & Kashmir, Arunachal Pradesh, Goa, Haryana, Mizoram and Uttaranchal.

Consumer Clubs : This scheme was launched in 2002, according to which a consumer club shall be set up in each Middle / High / Higher Secondary School / College affiliated to a government recognised Board / University. A grant of Rs.10,000 per consumer club is admissible under this scheme. This scheme has been decentralised and transferred to the State / UT Governments with effect from 1 April 2004. All interested NGO / VCOs shall apply to the Nodal Officer in the Food, PD and Consumer Welfare Department of the respective States / UTs. Till the end of

March 2006, 4661 consumer clubs have been sanctioned in the States of Andhra Pradesh, Tripura, Maharashtra, Gujarat, Orissa, Rajasthan, Karnataka, Tamilnadu, Jammu & Kashmir, Haryana, NCT of Delhi, Punjab, Sikkim, Lakshadweep, Himachal Pradesh and Arunachal Pradesh.

Promoting involvement of Research Institutions / Universities / Colleges, etc, in consumer protection and welfare : This scheme has been launched with a view to sponsoring research and evaluation studies in the field of consumer welfare to provide solution to the practical problems being faced by the consumers, to sponsor seminars / workshops / conferences on the consumer related topics, and to have necessary inputs for the formulation of policy / programme / scheme for protection and welfare of the consumers. The Indian Institute of Public Administration, New Delhi, has been identified as the nodal organisation to administer the scheme. Proposals received from Universities / Colleges / Research Institutions for conducting seminars, conferences, workshops, consumer festivals, research / evaluation studies are processed to sanction grants and then publish results of such studies in the form of books, monographs and pamphlets on consumer education and awareness. So far 109 applicants have been sanctioned grant till March 2007.

National Consumer Helpline : A National Consumer Helpline project has been established in co-ordination with Delhi University, Department of Commerce. Consumers from all over the country can dial toll-free number 1800-11-4000 and seek telephonic counselling for problems that they face as consumers. At the time of inception the Helpline intends to deal with problems related to telecom, courier, banking, insurance, financial services, etc. The Helpline has been formally launched on 15 March 2005, i.e. World Consumer Rights Day.

Consumer Online Research and Empowerment (CORE) Centre : A Consumer Online Research and Empowerment (CORE) Centre has been set up in collaboration with Consumer Co-ordination Council (CCC). The CORE Centre is intended to provide the most scientific and effective system of collection and dissemination of consumer related information to generate consumer awareness and empowerment of all sections of the society. It also provides e-counselling and mediation for consumer problems. The CORE project was formally launched on 15 March 2005.

BUREAU OF INDIAN STANDARDS

Bureau of Indian standards (BIS) is a National standards body engaged in the preparation and implementation of standards, operation of certification schemes both for products and systems, organisation and management of testing laboratories, creating consumer awareness and maintaining close liaison with international standards bodies. Major achievements in its various activities during the last two years are as under :

Standards Formulation

BIS is developing need-based standards in accordance with national priorities with the help of over 8800 technical experts as members of the technical committees. The standardization projects are properly screened within BIS to ensure their usefulness. During 2006-07, 327 standards were formulated. As on 31 March 2007, 18315 Indian Standards are in force covering important segments of economy, which help the industry in upgrading the quality of their goods and services. During 2006-07, among others, 29 standards on Gas Pipelines were published, out of which some of the important standards are IS 15666:2006 - Gas Turbines, IS 15654:2006 - Supervisory

Control and Data Acquisition (SCADA) System for Oil and gas pipeline and IS 15657:2006 - Centrifugal Pumps for Petroleum, Petrochemical and Natural gas industries.

Production Certification

The BIS Product Certification Marks Scheme provides the consumer an assurance of product quality conforming to national standards. The total number of operative licences was 19286 as on 31 March 2007 covering 999 different items ranging from food products to electronics. This scheme is basically voluntary in nature. However, keeping in view the safety, health and mass consumption of certain products, it is made mandatory for 73 items like LPG cylinders, Food colours, Packaged drinking water, etc. In order to protect the common consumer against unscrupulous traders and manufacturers misusing the BIS Standard mark, enforcement raids are carried out by various offices of BIS and, if necessary, prosecution cases filed in the court of law.

In order to expedite the process of grant of licence and for better servicing the industry, the Bureau has simplified the procedure for grant of licences, and certain activities such as surveillance visits at the factories, procurement of Market samples have been partially outsourced.

Laboratories

To complement and support the activity of product certification, BIS have established a chain of 8 laboratories in five regions, i.e. Sahibabad, Kolkata, Mohali, Mumbai and Chennai and at some of the branch offices, namely, Patna, Bangalore and Guwahati. Out of this, six laboratories have been accredited by NABL for their testing facilities and Electrical Calibration Laboratory at Sahibabad has been accredited for its calibration facility. During the year 2006-07 about 3000 sample were tested in BIS Laboratories. BIS also have recognised some outside laboratories, where the samples are diverted for testing. Besides this, training Programmes on Specific Product Testing, Six Sigma, Proficiency Testing have been organised. BIS laboratories are also actively involved in Proficiency Testing and Inter Laboratory Comparison Programmes organised by NABL. Presently, the modernisation programme in various laboratories is in process, which would result in the creation of additional test facilities, augmentation of existing facilities and upgradation / modernisation of present infrastructure. The budget allocation for modernization for the year 2006-07 Rs 1085 lakhs and for the year 2007-08 is Rs. 935 lakh has been fixed for this modernisation programme. The Electrical and Mechanical labs at Central Laboratory are also gearing up to equip with testing facilities to facilitate CE Marking for Indian manufacturers.

BIS Hallmarking Scheme

Hallmarking Scheme of Gold Jewellery was launched by BIS in April 2000 to protect consumers against victimisation due to irregular gold quality, develop export competitiveness and make India as a leading gold market centre in the World. The scheme, voluntary in nature, is operated under BIS Act 1986 through BIS network of Regional and Branch offices across the country. Under the scheme a jeweller has to obtain certification mark licence from BIS to get his jewellery hallmarked from a BIS recognised Assaying and Hallmarking Centre. The scheme thus does not grant self-marking rights to jewellers. The Hallmarking Centres are recognised by BIS based on laid down criteria after ensuring that the Centre has the required

infrastructure for Assaying and Hallmarking of gold jewellery in addition to security and safety of the same. This criterion is in line with the requirements of Convention on Control and Marking of Precious Metals (Vienna Convention 1972).

Since launch over 3800 jewellers have taken licences from BIS and have so far hallmarked over 223 lakh jewellery articles. As on date total number of Hallmarking Centres recognised across the country are 51. Recently, BIS has also launched hallmarking of Silver and 268 jewellers have been granted licences so far. List of BIS Recognised Assaying and Hallmarking Centres and BIS licensed jewellers is available on BIS website www.bis.org.in.

For Promotion of the Hallmarking Scheme, major initiatives have been taken by the Government as well as BIS recently. An effective publicity campaign for consumer Awareness has been launched by the Ministry of Consumer Affairs. Simultaneously, keeping in view the demand from various stakeholders and to give a boost to the hallmarking scheme, BIS has rationalised the scheme with effect from January 2006. This has resulted in significant growth in number of jewellers taking hallmarking licence for gold jewellery. The number of licences has increased from 1081 as on 31 Dec. 2005 to 4071 as on 31 May 2007. The average increase in no. of licences for gold jewellery has gone from 16 per month to 176 per month during last 17 months.

During 2005-06, BIS has conducted 136 awareness programmes on hallmarking all over the country in which large number of jewellers and consumers actively participated.

Under the scheme of setting up of Assaying and Hallmarking centres for gold with central assistance approved by Govt. and being implemented by BIS, four centres have been set up so far one each at Visakhapatnam, Jaipur, Ludhiana & Kottayam. Under the scheme selected applicants are given one time financial assistance @ 15% of cost of machinery & equipment subject to a maximum of Rs. 15 lakhs per centre for all locations except locations of north-east and special category states. For locations of north-east and special category states, the incentive has been revised and entrepreneurs would be given one time financial assistance @ 30% of cost of machinery & equipment subject to maximum of Rs. 30 lakhs per centre. The scheme has been carried forward to the 11th Plan and 50 centres are expected to be set up under the scheme during 11th Plan period.

Foreign Manufacturers and Importers Scheme

The BIS introduced certification schemes for foreign manufacturers and importers. Under the provisions of these schemes, foreign manufacturers can seek certification from BIS for marking their products with BIS Standard Mark and Indian importers can also seek BIS certification for applying BIS Standard Mark on the products being imported into the country. Under BIS Certification scheme for foreign manufacturers 65 licences have been granted and three licences have been granted to importers. The Directorate General of Foreign Trade of Ministry of Commerce has issued a notification making compliance to Indian standards for 73 items (covered under BIS mandatory Certification Scheme) mandatory as on 31 March 2007.

Management Systems Certification Scheme

Bureau of Indian Standards, is also operating Management Systems Certification scheme to promote quality culture among product and service providers to bring them at par with international levels. BIS is the only organisation in India which

operates the various Management Systems Certification Schemes under an Act of Parliament, namely, The BIS Act, 1986.

The BIS Quality System Certification Scheme, based on International Standards of Quality Management (ISO 9001), has 1274 operative licences as on 31 March 2007. This scheme has received accreditation in 23 technology sectors from the Raad voor Accreditatie (RVA) of Netherlands, an international accreditation body of repute and in 9 technology sectors from Quality Council of India (QCI). BIS has more than 250 Lead Auditors and Auditors spread over a network of Regional Offices and Branch Offices for providing timely and efficient service for various management systems

India is a signatory to World Trade Organisation (WTO). The WTO Agreement on Sanitary and Phytosanitary (SPS) measures makes it obligatory to adopt the standards, guidelines and recommendations issued by Codex Alimentarius Commission which advocates the adoption of HACCP. The Indian Standard on Food Hygiene – Hazard Analysis and Critical Control Point (HACCP) – System and Guidelines for Its Application, IS 15000:1998 is technically equivalent to the Codex document on the subject.

For the benefit of food sector, BIS launched HACCP Certification Scheme as per IS 15000:1998. Concept of HACCP-Quality Management System Integrated Certification (IS / ISO 9001:2000) Scheme was also introduced with the aim to provide the dual benefit of award of certification for HACCP and ISO 9001 through a single audit. It is helpful to exporters in the field of food and food products especially for exports to USA and Europe. Under the scheme, 67 integrated licences are in operation as on 31 March 2007.

BIS launched Environmental Management Systems Certification Scheme in 1997 as per IS / ISO 14001. This scheme helps the organisations to demonstrate their commitment to environmental protection, prevention of pollution and compliance with environmental legislation. Under the scheme, 124 licences are in operation as on 31 March 2007.

BIS launched Occupational Health and Safety Management System Certification (OH&SM) as per IS 18001:2000 in January 2003 which essentially enables an organisation to define, plan and manage a policy and objectives taking into account legislative requirements and information about significant hazards and risks, which the organisation can control and over which it can be expected to have an influence to protect its employees and others, whose health and safety may be affected by the activities of the organisation. Under the scheme, 33 licences are in operation as on 31 March 2007.

BIS has recently launched Food Safety Management System Certification Scheme as per IS / ISO 22000:2005 which is identical to ISO 22000 for Food Safety Management Systems requirements for any organisation in the Food Chain. It requires that all hazards that may be reasonably expected to occur in the food chain are identified, assessed and controlled. It can be applied independent of other management system standards or can be integrated with other existing management systems. It has the benefits of increased international acceptance of food products; reduces risk of product / service liability claims; satisfies customer contractual requirements; ensures safety of food products; and greater health protection. It helps to meet and demonstrate conformance to applicable food safety related statutory and regulatory requirements and ensures to compete effectively in national and international markets.

Bureau of Indian Standards has prepared an Indian Standard on Quality Management Systems – Requirement for Service quality by Public Service Organisations (IS 15700:2005) on top priority, as per the directives from the Government of India. This standard mainly includes the systems for 'service delivery', 'citizen charter', 'complaints handling', and 'continual improvement'. The implementation of this standard by a public service organisation would help it in building systems which would ensure that it is capable of providing effective and efficient services to its customers consistently, which will not only help it in enhancing customer satisfaction but also in continually improving its service. Bureau of Indian Standards, with approval of Government of India, has chalked out a time bound programme for implementation of this standard, including providing training to all concerned in various government / public service organisations, making them ready for third party certification and ultimately granting certification to successful organisations. It is hoped that this standard will be helpful to Government departments in providing timely services to their customers and timely resolving customer complaints, if any, to the satisfaction of complainants.

In order to ensure minimum standards of service delivery in all sectors pertaining to or influenced by government, and considering that government is the largest service provider, BIS has launched certification scheme as per this standard (IS 15700:2005), with aim to grant certificates to various Government Departments, public service organisations, which will demonstrate their ability to consistently provide effective and efficient service and continually improve their service and service delivery processes.

Information security has become a serious concern in today's interconnected business and environment. Therefore a need was felt to develop an international standard related to information security. International organisation for standardisation (ISO) and International Electro-technical Commission (IEC) have developed ISO / IEC 27001:2005 (Information Technology – Security Techniques – Information Security Management Systems Requirements). BIS has adopted this standard as IS / ISO / IEC 27001:2005 which is identical to the international standard ISO / IEC 27001. BIS is launching certification against IS / ISO / IEC 27001:2005 shortly.

Participation in International Activities

Since its inception in 1947, the then ISI and now BIS has been an active member of International Organisations namely: International Organisation for Standardisation (ISO) and International Electro-technical Commission (IEC). It participates in various policy-making committees of the international standard bodies. BIS also holds secretariat of some of the important ISO / IEC Committees which are of trade interest to India. As member of ISO, BIS also takes active part in the development of International Standards with a view to protecting the interests of Indian trade and industry. Recently, acknowledging the active involvement of BIS in International Standardisation activity, ISO has offered the position of Regional Liaison Officer (RLO) for South Asia Region to Director General, BIS. India is a certifying member of the IEC System of Quality Assessment of Electronic Components (IECQ) and IEC System for Conformity Testing to Standards for Safety of Electrical Equipment (IECEE). BIS is also functioning as the Central Enquiry Point under World Trade Organisation (WTO) for providing world wide information on standards, Certification System and Technical Regulations to Indian Industry and Trade. BIS is also having bilateral MOUs with a number of countries in the field of standardization and conformity assessment.

Promotional Activities

For implementation and understanding of Indian Standards; the BIS is conducting Consumer Awareness Programmes, Industry Awareness Programmes and Educational Utilisation of standards in leading Educational Institutes, through its network of Regional and Branch Offices and through its headquarters at New Delhi. BIS also adopted the international standard on 'Quality Management – Customer satisfaction – Guidelines for complaint handling in organisations' as IS / ISO 10002:2004. This standard will help organisations to handle / process complaints in a structured manner.

The BIS had set up in May 1997 a single window information and SSI Facilitation Cell at its Headquarters in New Delhi. The main objective is to provide a variety of information / assistance to Indian industries particularly small-scale sector. A number of entrepreneurs, consumers and professionals visit this centre for their queries. Rajiv Gandhi National Quality Award was instituted in 1991 by BIS, with the approval of Government of India, to inculcate the spirit of competitiveness among the manufacturers. The annual award compares with similar international awards such as Malcolm Baldrige National Quality Award of USA, Deming Prize of Japan and European Quality Award. So far Awards for the year 2006 have been given.

Training Activities

The BIS has set up the National Institute of Training for Standardisation (NITS) at NOIDA, UP. It conducts training programmes for industry as well as for BIS employees on various subjects related to standardisation, Conformity assessment, Management Systems, Consumer Protection, Laboratory management and other quality tools, etc. NITS also conducts two International Training Programmes on Standardisation and Quality Assurance and on Management Systems for Developing Countries every year. NITS conduct these training Programmes at the Institute on residential basis and also at the premises of the organisation as 'in-house' Programmes.

Computerization of BIS activities

A project named "Integrated Computerization of BIS Activities" which was launched in November 2002 in collaboration with NIC, has made considerable progress. The application software for certification marks has been developed, installed and operational in all offices of BIS. Software development for other two core activities viz., standards formulation and laboratory services is in process. The local area networking (LAN) at Headquarters, Regional offices and Branch Offices has been completed and commissioned. All BIS offices have been connected through Wide Area Network (WAN).

BIS web site : BIS has a web site with domain name www.bis.org. in. Information of interest to the Indian industry as well as consumers relating to various activities and schemes of the Bureau such as certification, standards formulation, consumer affairs, various applications forms, laboratory services, and other support services are available on the web site.

Hindi Website : Hindi version of the BIS website has been launched and is available through link on http / / www.bis.org.in. Content related to various certification schemes and services offered by BIS has been hosted.

Online Complaint Registration : Software for online complaint registration has

also been placed on the website, using which users / consumers can file complaints related to ISI marked products and BIS services from anywhere in India.

Intranet (IntraBIS) : To disseminate and share information for internal use of BIS offices a new restricted area on BIS web site with name IntraBIS has been initiated to host important in-house information. Important office circulars and status report of various laboratories are available on Intra BIS.

Email Connectively : All locations of the Bureau are well connected to one another thought the email / Internet connectivity.

Video Conferencing : BIS has set up Video Conferencing facilities between BIS Head-quarters and 4 Regional offices. The facilities are regularly utilized for holding meetings with the Regional offices and for performance monitoring.

BUFFER STOCKS

According to the current Buffer Stocking Policy of foodgrains, the total minimum stock in the Central Pool held by Public Agencies as on different dates in a year should be as under:

(lakh tonnes)

Date	Wheat	Rice	Total
1 April	40.00	122.00	162.00
1 July	171.00	98.00	269.00
1 October	110.00	52.00	162.00
1 January	82.00	118.00	200.00

STOCK POSITION

As on 31 March 2007 closing stock of foodgrains (wheat and rice) in the Central Pool with FCI and State Agencies stood at 177.35 lakh tonnes (provisional).

DISTRIBUTION

The offtake of foodgrains (wheat and rice) from the Central Pool by various States / UTs and others for distribution through fair price shops and for Welfare / Employment programmes in 2006-07 was 307.7 lakh tonnes as against 422.06 lakh tonnes during 2005-06. The total offtake of foodgrains (wheat and rice) under Targeted Public Distribution System (TPDS) during April 2006 to March 2007 is about 316.4 lakh tonnes comprising 212.49 lakh tonnes of rice and 103.90 lakh tonnes of wheat.

IMPORT AND EXPORT

A decision was taken in February 2006 to import 5 lakh tonnes of wheat through the STC for the southern states. In addition, the Government has decided to import 50 lakh tonnes of wheat through the STC for the country. Against the 55 lakh MTs of wheat contracted for import, a quantity of 54.55 lakh MTs has reached Indian Ports by 8th May 2007.

In the year 2007-08 a decision has been taken to import 1 million MTs of wheat by Mid August, 2007 through STC.

From the financial year 2000-2001, the Government decided to offer Rice and Wheat from the Central Pool for export in view of the huge surplus and low off take. However, after review, it was decided to stop fresh allocation from 11th August,

2003. After meeting the pending commitments, the exports have been totally stopped w.e.f. 1st October, 2004.

WELFARE SCHEMES

1. MID-DAY MEAL SCHEME

The Mid-Day Meal Scheme was launched by the Ministry of Human Resource Development (Department of Education) with effect from 15th August 1995 for the benefit of students in primary schools under Employment Assurance Scheme (EAS) / earlier Revamped Public Distribution System (RPDS) blocks (2368). The Scheme covers students (Class I-V) in the Government Primary Schools / Primary Schools aided by Government and the Primary Schools run by local bodies.

Foodgrains (wheat and rice) are supplied free of cost @ 100 gram per child per school day where cooked / processed hot meal is being served with a minimum content of 300 calories and 8-12 gm of protein each day of school for a minimum of 200 days and 3 kg per student per month for 9-11 months in a year, where foodgrains are distributed in raw form. In drought affected areas the mid day meal is distributed in summer vacations also.

To cut down delays in implementation of the scheme, Department of Elementary Education and Literacy has been authorised to make State / UT-wise allocation of foodgrains under intimation to this Department. Food Corporation of India (FCI) releases foodgrains to States / UTs at BPL rates as per allocation made by Department of Elementary Education and Literacy. Allocation / offtake of foodgrains under the scheme during 2001-2002, 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 is as under :

Figures in lakh tonnes

	Rice			Wheat					
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age offtake
2001-02	18.67	13.48	72.20	9.96	7.28	73.09	28.63	20.76	72.51
2002-03	18.84	13.75	72.98	9.40	7.45	79.25	28.24	21.2	75.07
2003-04	17.72	13.49	76.12	9.08	7.20	79.29	26.80	20.69	77.20
2004-05	20.14	15.41	76.51	7.35	5.92	80.54	27.49	21.33	77.59
2005-06	17.78	13.64	76.71	4.72	3.63	76.90	22.50	17.24	76.75
2006-07	17.22	13.05	75.78	4.38	3.50	80.00	21.60	16.55	76.62

2. WHEAT-BASED NUTRITION PROGRAMME

The Scheme is implemented by the Department of Women and Child Development, The foodgrains allotted under this Scheme are utilised by the States / UTs under Integrated Child Development Scheme (ICDS) for providing nutritious / energy food to children below 6 years of age and expectant / lactating women.

Allocation / offtake of foodgrains under the scheme from 2001-02 to 2006-07 is as under :

Figures in lakh tonnes

	Rice			Wheat					
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age offftake
2001-02	0.80	0.32	0.40	1.75	1.03	58.85	2.55	1.35	52.94
2002-03	1.47	0.69	46.93	1.75	2.13	65.13	3.22	2.82	59.49
2003-04	1.04	0.61	58.65	3.72	3.16	66.39	4.76	3.77	64.70
2004-05	1.16	0.85	73.27	3.42	3.57	104.38	4.58	4.42	97.16
2005-06	1.5	2.07*	>100	2.82	2.73	96.80	4.32	4.8	>100
2006-07	1.98	1.61	81.31	3.19	2.98	93.42	5.17	4.59	89.00

* Backlog quota

3. SCHEME FOR SUPPLY OF FOODGRAINS TO HOSTELS / WELFARE INSTITUTIONS (5% OF BPL ALLOCATION)

With a view to meeting the requirement of Hostels / Welfare Institutions viz., N.G.Os / Charitable Institutions which help the shelterless / homeless poor and other categories not covered under TPDS or under any other Welfare Schemes, an additional allocation of foodgrains (rice and wheat) equal to 5% of the BPL allocation of each State / UT is made to States / UTs at BPL rates. This scheme was introduced during 2002-03 to liquidate the stocks of foodgrains.

As per the directions of the Parliamentary Standing Committee, the allocation under the scheme was reviewed and rationalized on the basis of average offtake of foodgrains during the last 3 years.

Allocation / offtake of foodgrains under the scheme from 2002-03 to 2006-07 is as under :-

Figures in lakh tonnes

	Rice			Wheat					
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age offftake
2002-03	6.58	1.30	19.75	4.53	0.14	3.09	11.11	1.44	12.96
2003-04	6.25	3.15	50.4	5.19	0.23	4.43	11.44	3.38	29.54
2004-05	6.06	1.94	32.01	4.80	0.75	15.62	10.86	2.69	24.76
2005-06	3.47	2.37	68.29	2.44	0.27	11.06	5.91	2.64	43.99
2006-07	3.26	2.76	84.92	0.57	0.25	43.85	3.83	3.01	78.59

During 2005-06, the allocation and offtake of foodgrains under the scheme were reviewed. On the basis of offtake, for last three years, of States / UTs, (on recommendation of the Parliamentary Standing Committee for Food) the allocation to the States / UTs was rationalized w.e.f. August, 2005

The offtake of foodgrains of States / UTs has already increased from 2004-05 to 2006-07.

Note : Offtake figure during 2002-03 & 2003-04 includes lifting against SC / ST / OBC Hostels.

4. SCHEME FOR SUPPLY OF FOODGRAINS FOR SC / ST / OBC HOSTELS

This scheme was introduced in October, 1994. Ministry of Consumer Affairs. Food & Public Distribution is the nodal Ministry for the scheme. Allocation of foodgrains was made for the first time during 2001-02 to nineteen States on the recommendation of Ministry of Social Justice & Empowerment. The residents of the hostels having 2 / 3rd students belonging to SC / ST / OBC are eligible to get 15 kg foodgrains per resident per month. In such hostels, foodgrains are provided for all the resident students, including those who belong to other categories. Only Karnataka and Andhra Pradesh are availing this scheme.

Allocation / offtake of foodgrains under the scheme during 2001-02, 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 is as under :

Figures in lakh tonnes

	Rice			Wheat		
Year	Allocation	Offtake	%age of offtake	Allocation	Offtake*	%age of offtake
2001-02	1.96	0.76	38.77	-	0.07	3.57
2002-03	0.36	-				
2003-04	1.63	-				
2004-05	1.34	-		-	-	-
2005-06	-	-	-	0.14	-	-
2006-07**	1.62	-	-	0.14	-	-

Note : * Offtake figures are combined with offtake against 5% BPL allocation w.e.f. 2002-03.

** 1,33,693 MT of rice to Andhra Pradesh and 28332.30 MT of rice and 14166.15 MT of wheat to Karnataka in 2006-07.

5. ANNAPURNA SCHEME

The Ministry of Rural Development launched the scheme in 2000-2001. Indigent senior citizens of 65 years of age or above who though eligible for old age pension under the National Old Age Pension Scheme (NOAPS) but are not getting the pension are covered under the Scheme. 10 kg of foodgrains per person per month are supplied free of cost under the scheme.

From 2002-2003 it has been transferred to State Plan along with the National Social Assistance Programme comprising the National Old Age Pension Scheme and the National Family Benefit Scheme. The funds for the transferred scheme are being released by the Ministry of Finance as Additional Central Assistance (ACA) to the State Plan and the States have the requisite flexibility in the choice of beneficiaries and implementation of the Scheme. The implementation of the Scheme at the ground rests with the States / UTs.

The foodgrains are released to the State Governments on the existing norms at BPL rates. Allocation / offtake of foodgrains under the scheme during 2001-02, 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 is as under :-

Figures in lakh tonnes

		Rice			Wheat				
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age offftake
2001-02	1.62*	0.93	57.40						
2002-03	0.54	0.53	98.14	0.24	0.62	258.30	0.78	1.15	147.81
2003-04	0.56	0.45	80.35	0.67	0.64	95.52	1.23	1.09	88.61
2004-05	0.90	0.64	71.11	0.77	0.68	101.49	1.67	1.32	79.04
2005-06	0.90	0.69	76.66	0.77	0.70	90.90	1.67	1.39	83.23
2006-07	0.90	0.61	67.78	0.77	0.29	37.66	1.67	0.90	53.69

* The offtake is reducing due to introduction of National Employees Guarantee Act.

* offtake includes lifting against backlog quota.

6. SAMPOORNA GRAMIN ROZGAR YOJANA

The Prime Minister in his Independence Day speech, on 15.8.2001 announced the introduction of a Universal Food for Work Programme to be called "Sampoorna Gramin Rozgar Yojana" in all the States / UTs for organising various employment generation programmes. Under the Scheme, 50 lakh tonnes of foodgrains are to be allotted to the States / UTs free of cost by Ministry of Rural Development. The Ministry of Rural Development will reimburse the cost of foodgrains at economic cost prevailing at the time.

The Ministry of Rural Development, which is the nodal Central Ministry for the programme, launched the scheme on 25.9.2001.

The Ministry of Rural Development has been authorized to communicate to FCI directly the allocations made to various State Governments under the scheme.

Allocation / offtake of foodgrains under the scheme during 2001-2002, 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 is as under :

Figures in lakh tonnes

		Rice				Wheat			
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age offftake
2001-02	23.64	11.69	49.45	11.14	5.64	50.62	34.78	17.33	49.82
2002-03	28.01	21.15	75.50	13.90	18.87	135.75	41.99	40.02	95.30
2003-04	73.55	63.49	86.32	39.35	42.73	108.58	112.9	106.22	94.08
2004-05	32.64	30.27	92.73	16.99	19.73	116.12	49.63	50.00	100.00
2005-06	24.81	24.21	97.58	12.58	15.71	124.88	37.39	39.92	>100
2006-07	12.04	11.66	96.84	4.89	4.77	97.54	16.93	16.43	97.04

7. SPECIAL COMPONENT OF SAMPOORNA GRAMIN ROZGAR YOJANA

Special Component of Sampoorna Gramin Rozgar Yojana with a view to extending support to the people affected by Natural Calamities in States / UTs. Foodgrains is released under the Spl. Comp. of SGRY by the Ministry of Rural Development being

nodal Ministry for the Scheme, after the approval of Department of Food and Public Distribution.

Allocation and offtake of foodgrains under the scheme during 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 is as under :-

Figures in lakh tonnes

	Rice			Wheat					
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age offftake
2002-03	37.02	31.89	86.14	26.38	13.33	50.53	63.40	45.22	71.32
2003-04	43.05	32.55	75.60	22.79	21.89	96.05	65.84	54.44	82.68
2004-05	14.37	12.29	85.52	10.68	7.90	73.97	25.05	20.19	80.59
2005-06	5.99	7.44	124.20	7.15	9.82	137.34	13.10	17.26	>100
2006-07	4.94	5.92	119.83	1.70	0.21	12.35	6.64	6.13	92.32

Offtake includes lifting against backlog quota

8. NUTRITIONAL PROGRAMME FOR ADOLESCENT GIRLS (NPAG)

A Pilot Project – ''Nutritional Programme for Adolescent Girls" (NPAG) was launched by the Planning Commission initially for a period of two years, i.e. 2002-03 and 2003-04 in 51 identified districts, i.e. in two of the backward districts in each of the major States and most populous district (excluding the capital district) in remaining smaller States / UTs in the country. This scheme was restarted in 2005-06. The Ministry of Women and Child Development administers the scheme at the central level and State / UT Governments implement the scheme.

As per the revised guidelines of the programme, adolescent girls (age group 11-19 years) as identified by weight would be covered irrespective of financial status of the family to which they belong. Free foodgrains @ 6 kg. per beneficiary per month is provided to the adolescent girls (weight < 35 kg.) initially for a period of three months. Those beneficiaries, who cross the cut off point for weight, would not receive foodgrains any further. Those who inspite of receiving foodgrains for three consequent months do not show improvement in nutritional status are investigated by Anganwari Workers and, if necessary, referred to a doctor for investigation and treatment, but continue to receive free foodgrains for the next three months.

The funds for the year 2005-06 were given as 100% grant to States so that they can provide foodgrains through the Public Distribution System free of cost to the families of identified undernourished persons. The Ministry of Finance releases Special Central Assistance to the States / UTs.

Department of Food and Public Distribution provides foodgrains at BPL rates to the States / UT Government for implementing the programme through M / o Human Resources. Annual allocation and offtake of foodgrains under the programme during 2002-03, 2003-04, 2005-06 and 2006-07 are as under :-

Figures in lakh tonnes

	Rice			Wheat					
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age of offtake
2002-03	0.40	0.11	27.50	0.22	0.87	3.95	0.62	0.98	>100
2003-04	2.22	0.63	28.37	0.29	0.00	0.00	2.51	0.63	25.09
2004-05									
2005-06	0.68	0.40	58.82	0.35	0.08	22.85	1.03	0.48	46.60
2006-07	0.41	0.45	109.75	0.07	0.07	100.00	0.48	0.52	108.33

* The offtake is on the increase due to directions of Supreme Court to implement the scheme vigorously.

9. EMERGENCY FEEDING PROGRAMME

Emergency Feeding Programme is a food-based intervention targeted for old, infirm and destitute persons belonging to BPL households to provide them food security in their distress conditions. This was introduced in May 2001. The Scheme is being implemented by Government of Orissa in eight KBK Districts namely Bolangir, Kalahandi, Koraput, Malkangiri, Nawarangpur, Naupada, Rayagada and Sonepur of Orissa covering two lakh beneficiaries. Under the scheme, foodgrains (rice) at BPL rates is being allocated to State Government on the recommendation of Ministry of Social Justice and Empowerment since May 2001 by Department of Food and Public Distribution. 14,400 MT of rice is allocated for the said two lakh beneficiaries @ 6 kg / beneficiary / month upto August, 2006. From September, 06 to March, 07 an additional quantity of 2110 MT of rice has been allocated for the 2 lakh beneficiaries @ 7.5 kgs / per beneficiary / month. Thus the total allocation for the year 2006-07 becomes 16510 MT for the period from September, 2006 to March, 2007.

Cooked foods containing, inter-alia, rice-200 gms, Dal (pulse) - 40 gms, vegetables - 30 gms is provided in the diet of each EFP beneficiary daily by the State Government. The funds were provided from the Additional Central Assistance (ACA), but now it has been termed as Special Central Assistance (SCA). The scheme is being implemented in the KBK districts under the Revised Long Term Action Plan (RLTAP) and SCA is allocated by Planning Commission.

Following quantities of rice has been allocated during 2001-02, 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 under the Scheme :

(fig. in '000' tonnes)

Year	Annual allocation	Offtake	% of offtake
2001-02	12.00	4.97	41.41
2002-03	14.40	13.41	93.12
2003-04	14.40	14.10	97.91
2004-05	14.40	14.18	98.47
2005-06	14.40	12.20	84.72
2006-07	16.51*	14.31	86.73

* Includes additional allocation of 2110 MT.

VILLAGE GRAIN BANKS SCHEME

- A Centrally Sponsored Scheme of Grains Banks in Tribal villages was launched during 1996-97 by the Ministry of Tribal Affairs in 11 States. During 1996-97 to 2004-05 Ministry of Tribal Affairs released Rs. 10.26 crores for establishing 4858 Grain Banks. Now the scheme has been transferred to the Ministry of Food & Public Distribution.
- The revised Village Grain Bank Scheme for establishment of Grain Banks in chronically food scarce areas was approved by Ministry of Finance on 15.2.2006 for the year 2005-06 and 2006-07 subject is to evaluation in the 11th Plan.
- The main objective of the scheme is to provide safeguard against starvation during the period of natural calamity or during lean season.
- The grain banks are to be set up in food scarce areas like the drought prone areas, the hot and cold desert areas, tribal areas and the inaccessible hilly areas.

The revised scheme envisages inclusion of all willing BPL / AAY families in the villages which will be identified by the State Govt. in food deficit areas. The quantity to be lent and the period of repayment will be decided by the Group themselves. To ensure recovery of grains lent, it is proposed to tie up the scheme with the entitlement of the members under TPDS.

- Village Panchayat / Gram Sabha, Self Help Group or NGOs etc. identified by the State Govt. shall be eligible for running the Grain Banks. Each such Executive Committee will have a woman as its member.
- A provision of Rs. 20.20 crores was made for 2005-06 (Plan) by Planning Commission out of which an amount of Rs. 19.76 crores was sanctioned for the establishment of 3282 grain banks in the States of Andhra Pradesh, Orissa, Chhattisgarh, Madhya Pradesh, Jharkhand, Tripura & Meghalaya. A provision of Rs. 50.00 crores has been made for 2006-07 out of which Rs. 49.996 crores has been sanctioned for the establishment of 7925 Grain Banks in the States of Uttar Pradesh, Assam, Sikkim, Himachal Pradesh, Gujarat, West Bengal, Nagaland, Andhra Pradesh, Uttranchal, Chhattisgarh, Maharashtra and Manipur.
- An additional amount of Rs. 1,79,81,600 sanctioned on 30.3.2007 for establishment of 266 Village Grain Banks in Maharashtra.
- As per the Budget allocation for 2007-08 an amount of Rs. 16.90 crores has been allocated with a target of 2000 Village Grain Banks during the year. However, sanctioning of Village Grain Banks depends on proposals being received from the State Governments.
- The estimated cost of setting up one grain bank is as follows :

a)	Cost of foodgrains @ 1 quintal per family for average 40 families per grain economic bank.	40 quintals of foodgrains at Rs. 1150.00 per quintal (based on the aggregate present cost of grains). i.e. Rs. 46,000 / -
b)	Transportation cost @ Rs. 90 / - per quintal	90 x 40 = Rs. 3,600 / - (Rs. 1800 to be borne by the State Govt.)
c)	Training expenses for trainers and trainees	Rs. 1400 / - per bank
d)	Storge weights and scales etc.	Rs. 6000 / - per bank
e)	Monitoring and Administrative Cost	Rs. 3000 / - per bank
	Total*	**Rs. 60,000 per bank**

VILLAGE GRAIN BANKS SCHEME

Statement showing funds recommended / required for establishment of Grain Banks during 2005-06.

S. No.	State	No. of Banks recom-mended	Quantity of foodgrain (R/W) MT	Financial assistance for foodgrains* Rs.	Funds for establish-ment of Grain Banks** Rs.	Total Financial Assistance Rs.
	2005-6					
1.	**A.P.**	**1214**	**4856(R)**	**6,24,57,872**	**1,48,10,800**	**7,72,68,672**
2.	**Orissa**	**240**	**960(R)**	**1,23,47,520**	**29,28,000**	**1,52,75,520**
3.	**Chhattisgarh**	**262**	**1048(R)**	**1,34,79,376**	**31,96,400**	**1,66,75,776**
4.	**M.P.**	**926**	**3704 (1852R + 1852W)**	**4,20,25,399**	**56,12,200**	**4,76,37,599**
5.	**Jharkhand**	**583**	**2,332(R)**	**2,99,94,184**	**71,12,600**	**3,71,06,784**
	Total	**3225**				**19,39,64,351**
	N.E. Region					
1.	Tripura	13	52(R)	6,68,824	1,58,600	8,27,424
2.	Meghalaya	44	176(R)	22,63,712	5,36,800	28,00,512
	Total (NE)	**57**				**36,27,936**
	Total	**3282**				**19,75,92,287**

* At economic cost : Rice : Rs. 12,862/- per MT & Wheat : Rs. 11276.30/- per MT

** @ Rs. 12,200/- per grain bank

Statement showing funds recommended / required for establishment of Grain Banks during 2006-07.

S. No.	State	No. of Banks recom-mended	Quantity of foodgrain (R/W) MT	Financial assistance for foodgrains* Rs.	Funds for establish-ment of Grain Banks** Rs.	Total Financial Assistance Rs.
	2006-07					
1.	U.P.	500	2000	1,96,59,800	61,00,000	2,57,59,800
2.	Assam	100	400	51,44,800	12,20,000	63,64,800
3.	Sikkim	80	320	41,15,840	9,76,000	50,91,840
4.	H.P.	55	220	28,29,640	6,71,000	35,00,640
5.	Gujarat	226	272/632	1,06,25,086	27,57,200	1,33,82,286
6.	West Bengal	170	680	87,46,160	20,74,000	1,08,20,160
7.	Nagaland	150	600	77,17,200	18,30,000	95,47,200
8.	Andhra Pd.	3743	14972	19,25,69,864	4,34,45,167	23,60,15,031
9.	Uttranchal	55	220	28,29,640	6,71,000	35,00,640
10.	Chhatisgarh	1642	6568	8,44,77,616	2,00,32,400	10,45,10,016

11.	Maharashtra	1111	4444	6,19,93,8000	1,35,54,200	7,55,48,000
12.	Manipur	93	372	47,84,664	11,34,600	59,19,264
13.	Maharashtra	266	1064	1,47,36,400	32,45,200	1,79,81,600
	Total	**8191**				**51,79,41,277**

* At economic cost : Rice : Rs. 12,862/- per MT & Wheat : Rs. 11,276.30/- per MT

** @ Rs. 12,200/- per grain bank

Statement showing allocation and offtake of foodgrains under Village Grain Banks Scheme

Figures in lakh tonnes

	Rice			Wheat					
Year	Allocation	Offtake	%age of offtake	Allo-ca-tion	Off-take	%age of offtake	Total alloca tion	Total offtake	%age of offtake
2006-07	0.40	0.16	49.00	0.04	0.02	50.00	0.44	0.18	40.91

NATIONAL FOOD FOR WORK PROGRAMME (NFFWP)

The scheme for National Food for Work Programme has been launched with effect from 13.10.2004. This programme is being implemented in 150 most backward districts of the country so that the generation of supplementary wage employment and providing of food security through creation of need based economic, social and community assets in these districts is further intensified. Most of the backward districts, which would benefit from the scheme are in the tribal belts. The scheme will provide 100 days of employment at minimum wages for at least one able bodied person from each household in the country. Allocation and offtake of foodgrains under the scheme during 2004-05, 2005-06 and 2006-07 is as under :

Figures in lakh tones

	Rice			Wheat		
Year	Alloca-tion	Offtake	% of offtake	Alloca-tion	Offtake	% of offtake
2004-05	14.24	3.06	21.48	5.75	0.65	11.30
2005-06	6.65	6.59	99.09	2.53	4.08	161.26
2006-07	0.00	1.22	0.00	0.00	0.21	0.00

* Offtake include backlog quota.

TARGETTED PUBLIC DISTRIBUTION SYSTEM

In order to ensure availability of minimum quantity of foodgrains to the families living below the poverty line, the Government launched the TPDS in June 1997. It was intended to benefit about six crore poor families in the country for whom a quantum of 72 lakh tonnes of foodgrains was earmarked annually at the rate of 10 kg per family per month.

The allocation was increased from 10 kg to 20 kg from 1 April 2000. This was increased from 20 to 25 kg per family per month from July 2001. From 1 April 2002, this allocation has been further increased from 25 to 35 kg per family per month. The Central Issue Price (CIP) for BPL families is Rs 4.15 per kg for wheat and Rs 5.65 per kg for rice.

Allocation and offtake of Foodgrains (in lakh tonnes)

Year	Allocation	Offtake
2003-04	712.52	239.31
2004-05	717	293.55
2005-06	716.21	311.06
2006-07	576.56	313.69

ANTYODAYA ANNA YOJANA (AAY)

In order to make TPDS more focused and targeted towards the poorest section of population, the "Antyodaya Anna Yojana" (AAY) was launched in December, 2000 for one crore poor families. Initially AAY contemplated identification of one crore poorest of the poor families from amongst the BPL families covered under TPDS within the States and providing them foodgrains at a highly subsidised rate of Rs. 2/- per kg for wheat and Rs. 3/- per kg for rice. The States / UTs are required to bear the distribution cost, including margin to dealers and retailers as well as the transportation cost. Thus the entire food subsidy is being passed on to the consumers under the scheme.

The scale of issue that was initially 25 kg per family per month has been increased to 35 kg per family per month with effect from 1st April, 2002.

The AAY Scheme was expanded in 2003-2004 by adding another 50 lakh households from amongst the BPL families. It was again expanded with effect from 1st August, 2004 by another 50 lakh BPL families by including. inter alia, all households at the risk of hunger. In 2005-06, it was further expanded to cover another 50 lakh BPL households, thus increasing its coverage to 2.5 crore households.

IDENTIFICATION OF FAMILIES AND ALLOCATION OF FOODGRAINS

Identification of the Antyodaya families and issuing of distinctive Ration Cards to these families is the responsibility of the concerned State / UT Governments. Detailed guidelines were issued to the States / UTs for identification of the Antyodaya families under the expanded AAY. Allocation of foodgrains under the scheme is being made to the States / UTs on the basis of distinctive AAY Ration Cards issued to the identified families.

Open Market Sale Scheme (Domestic) : Besides meeting the requirement of the Public Distribution System (PDS) and other foodgrains-based welfare schemes of the Government and maintaining a buffer stock, foodgrains from the Central Pool are also released to the open market to augment the availability especially in the deficit regions and during the lean season of supply so as to have a moderating effect on the open market prices. The sale of foodgrains from the Central pool in the open market is also helpful in reducing the inventory of foodgrains with the FCI and other procuring agencies and hence saving in carrying costs.

Open market Sale of Wheat : Wheat is sold in the open market under the Open Market Sale Scheme (Domestic) OMSS (D) in which the commodity is made available to buyers throughout the country at pre-fixed prices. The prices of wheat under the scheme is presently determined by the High Level Committee (HLC) of the FCI which is Inter-Departmental body comprising representatives from the FCI and other concerned Ministries / Departments of the Government of India. The prices of wheat of different crop years also vary since prices of older stocks have been fixed

at lower levels than those of the newer stocks in order to facilitate off-take of the older stocks. A quantity of 3.90 lakh MT of wheat was released during the month of Feb. and March, 2007 at a fixed price of Rs. 986.06 per quintal to various States where prices were ruling high.

INTERNATIONAL CO-OPERATION

India is a member of the following International Organisations:

International Grains Council (IGC)

Food and Agriculture Organisation (FAO) of the UN including its Committee on World Food Security (WFS)

International Sugar Organisation

India has been an exporting member of the International Grains Council (IGC) since July, 2003. The Department of Food and Public Distribution has been participating in various conferences / meetings of the IGC from time to time. Representing the Government of India, this department has participated recently in the 25th Session of the International Grains Council (IGC) on 11th June, 2007 and the IGC Grains Conference, 2007 on 12th June, 2007 held in London. The Department of Food & Public Distribution also allocates foodgrains under welfare / development schemes to WFP assisted / supported projects in India at BPL rate. India is a member of the SAARC food Security Bank. India's assessed share of foodgrains for the reserve of SAARC Food Security Bank is 1,53,200 MTs out of total reserve of 2,41,580 MTs. Department of Food & Public Distribution has also participated in the 31st Council Session of the International Sugar Organisation (ISO) held in Mauritius during 29th May-1st June, 2007.

STORAGE

The storage capacity of the Central Warehousing Corporation (CWC) and 17 State Warehousing Corporations (SWCs) as on 1 April 2007 was as under:

STORAGE CAPACITY

(in Lakh MT)

Agency	Constructed	Hired	Open / Plinth	Management	Total
CWC	66.99	16.25	14.11	4.85	102.20
SWCs	119.54	65.24	7.08	-	191.86

The CWC started its operations in 1957 with a capacity of 7,000 tonnes in hired godowns. It has steadily increased its warehousing capacity and is operating 511 centres with a total capacity of 102.20 lakh MT as on 1st April 2007. The CWC is also operating 82 Custom Bonded Warehouses with a total capacity of 5.22 lakh tonnes as on 1 April 2007.

The CWC has associates in State Warehousing Corporations in 17 States. The total investment of the CWC, which is a 50 per cent shareholder in the equity capital of State Warehousing Corporation, was 56.84 crore as on 1st April, 2007.

MANAGEMENT OF FOODGRAINS

SAVE GRAIN CAMPAIGN

The scheme is implemented through a network of 12 SGC offices in close collaboration with the State Governments and NGOs. The main objective of the scheme is to transfer the technical know-how developed by IGMRI to the farmers

for minimising the post-harvest losses in foodgrains. Under the scheme an assistance for purchasing the metal bins and other inputs @ Rs 10,000 per nucleus village is provided to the farmers.

During 2006-2007, 29250 farmers were trained in stipendiary / non-stipendiary training programmes. 15,977 metal bins distributed, 15,711 non-metallic storage structures improved / constructed and 336 nucleus villages developed.

QUALITY STANDARDS FOR FOODGRAINS

The Government exercises due control over the quality of foodgrains procured for the Central / state Pool. The Quality Control Cell of the Ministry at New Delhi, Kolkata and Hyderabad monitor the quality of foodgrains being procured by FCI and State agencies for Central Pool as well as at the time of storage and distribution. During 2005-2006, 521 Food Storage Depots, 373 Procurement Centres, 168 Rail / Truck Heads, 130 Rice Mills, 762 F.P. shops have been inspected by the officers of Quality Control Cell.

INDIAN GRAIN STORAGE MANAGEMENT AND RESEARCH INSTITUTE

Indian Grain Storage Management and Research Institute (IGMRI), Hapur, is engaged in the training and R&D work relating to grain storage management. The Institute has three field stations at Hyderabad, Jorhat and Ludhiana. The IGMRI also conducts various training courses on storage, inspection of foodgrains, pest control, etc. for the officers of storage agencies, pest control operators, etc.

During 2006-07, 30 long / short-term training courses and 13 artisan trainings were conducted, 2282 food grains samples for physical quality parameters, 712 samples for pesticide residue and 380 samples for mycotoxin contamination were analysed by IGMRI, Hapur and its field stations.

EDIBLE OILS

It has been the policy of the government to have an efficient management of edible oils so as to ensure its easy availability to consumers at reasonable prices, throughout the country. Oilseed production gained momentum with improving yields with the launching of the Technology Mission on Oilseeds by the Government in 1986. Production increased from 108.30 lakh tonnes in 1985-86 to 247.50 lakh tonnes in 1998-99. Oilseed production was depressed between 1999-2000 and 2002- 03. After a low production of 148.39 lakh tonnes in 2002-03, however, production bounced back to 251.86 lakh tonnes in 2003-04. According to Ministry of Agriculture, the production of oilseeds during 2004-05 and 2005-06 has been 243.54 lakh tonnes and 279.79 lakh tonnes, respectively. Potential of the secondary sources of edible oils like cotton seeds, copra, rice bran and oil bearing materials from tree and forest origin has also been exploited moderately and these sources are now contributing to the level of 25 per cent of the domestic vegetable oil production. The country has been resorting to import of edible oils to bridge the gap between the demand and supply. Edible Oils, which was in the negative list of imports was first decanalised partially in April 1994. The import policy was further liberalised from 1 April 1999 allowing import of all edible oils except coconut oil. In order to harmonise the interests of domestic oilseeds growers, consumers and processors and to regulate large import of edible oils to the extent possible, the duty structure on edible oils is revised from time to time.

STATUS OF VEGETABLE OIL INDUSTRY

The Vegetable Oil Industry is administered through the following control / regulation orders: (i) Vegetable Oil Products (Regulation) Order, 1998; (ii) Edible Oils Packaging (Regulation) Order, 1998; and (iii) Solvent Extracted Oil, De-Oiled Meal and Edible Flour (Control) order, 1967. These orders are statutory in nature and derive their powers from the Essential Commodities Act, 1955.

Vegetable Oil Industry was delicensed in July 1991. No industrial licence is required for activity relating to processing of vegetable oils subject to the condition of the locational policy angle. Crushing of oilseeds, namely, Groundnut, Mustard / Rapeseed and Sesame has been reserved for the small- scale industries, Agro-based industries and oilseeds growers co-operatives.

There are 267 Vanaspati units in the country with an annual capacity of 53.60 lakh MTs. The production of Vanaspati (including margarine and Bakery shortening) is around 11.00 lakh MTs and the capacity utilisation is around 23 per cent. There are 772 solvent extraction plants with an annual capacity of 415 lakh MTs (in terms of oil Bearing Material) in the country and the capacity utilization is around 35 per cent.

SUGAR

Under the Sugar Cess Act, 1982, a cess of Rs. 14.00 per quintal is being collected on all sugar produced by any sugar factory in India.

The Sugar Development Fund Act, 1982, provides that an amount equivalent to the proceeds of the duty of excise levied and collected under the Sugar Cess Act, 1982 reduced by the cost of collection as determined by the Central Government, together with any money received by the Central Government for the purpose of this Act, shall after due appropriation made by Parliament by law, be credited to the Fund.

OBJECTIVE OF S.D.F.

As provided under the Sugar Development Fund Rules, the Fund has to be utilized by the Government of India for the following :

(a) Making loans for facilitating the rehabilitation and modernization of any sugar factory.

(b) Making loans for the undertaking of any scheme for development of sugarcane in the area in which any sugar factory is situated.

(c) Subsidy for the expenditure on internal transport and freight charges on export shipment of sugar.

(d) Making loans for bagasse-based co-generation power projects.

(e) Making loans for production of anhydrous alcohol or ethanol from alcohol / molasses.

(f) Defraying expenditure for the purpose of building up and maintenance of buffer stock with a view to stabilizing price of sugar.

(g) Defraying any other expenditure for the purpose of the Act.

FINANCIAL PACKAGE FOR RESTRUCTURING TERM LOANS OF CO-OPERATIVE SUGAR MILLS THROUGH NABARD.

The Finance Minister in his Budget Speech for 2005-06 had made the following announcements to revitalize the sugar industry:

a) Sugar factories that were operational in 2002-03 sugar season will be assisted to restructure. NABARD, in consultation with State Governments, RBI, Banks and Financial Institutions will work out a scheme for providing a financial package with a moratorium of two years on both principal and interest and a schedule of payment having regard to the commercial viability of each unit.

b) Indian Banks' Association (IBA) and NABARD will be asked to work out a scheme under which individual sugar factories may negotiate the rate of interest on their past high interest loans.

In pursuance to the above announcements, a Committee set up in NABARD prepared a package of assistance for the Sugar Mills in the country which have **term loans** outstanding as on 31st March, 2005, and which are commercially viable and have adequate operational surplus to repay the said term loans, will be categorized as falling under either Category A or Category B. Accordingly the term loans will be restructured / rescheduled to enable repayment within five years (for Category A) or within fifteen (15) years (for Category B). The rate of interest on the restructured loans will be reduced to 10% per annum w.e.f. 1-4-2005, irrespective of the original contractual rate. The Government of India will provide interest subvention on the restructured loan. The interest subvention is estimated at Rs. 525 crores (later revised to Rs. 560 crores). The package is under implementation.

FOOD PROCESSING

Role and Objectives

The Ministry of Food Processing Industries (MFPI) was set up in July 1988 to give an impetus to development of food processing sector in the country. A strong and dynamic food processing sector plays a vital role in diversification and commercialisation of agriculture, enhances shelf life, ensures value addition to the agricultural produce, generates employment, enhances income of farmers and creates markets for export of agro foods.

The Ministry of Food Processing Industries is concerned with formulation and implementation of the policies & plans for the food processing industries within the overall national priorities and objectives. The Ministry acts as a catalyst for bringing in greater investment into this sector, guiding and helping the industry, and creating a conducive environment for healthy growth of the food processing industry. Within these overall objectives, the Ministry aims at better utilization and value addition of agricultural produce, minimizing wastage at all stages in the food processing chain by development of infrastructure for storage, transportation and processing of agro-food produce, induction of modern technology into the food processing industries, encouraging R&D in food processing for product & process development, providing policy support, promotional initiatives and facilities to promote value added exports, create the critical infrastructure to fill the gaps in the supply chain from farm to consumer.

Major Policy initiatives taken :

- Food processing has been identifies as industry with employment potential.
- Most of the processed food items have been exempted from the purview of licensing under the Industries (Development & Regulation) Act, 1951, except items reserved for small-sector and alcoholic beverages.
- To ensure easy availability of credit, Government has included food processing

industries in the list of priority sector for bank lending. NABARD has created a refinancing window with a corpus of Rs. 1000 crore, especially for agro-processing infrastructure and market development.

- Rs. 150 crore earmarked for NHM for terminal markets.
- Food processing industries were included in the list of priority sector for bank lending in 1999.
- Automatic approval for foreign equity upto 100% is available for most of the processed food items excepting alcohol and beer and those reserved for small scale sector subject to certain conditions.
- Excise duty on processed fruit and vegetables was brought down from 16% to zero level in the Budget, 2001-02.
- In the budget of 2004-05 income tax holiday and other concessions announced for certain categories of food processing industries.
- Under Income Tax Act, a deduction of 100% of profit for five years and 25% of profits for the next five years allowed in case of new agro processing industries set up to process, preserve and package fruits and vegetables.
- In the Budget for 2007-08, the following fiscal incentives have been announced:
    - Exemption limit of excise duty for small scale Industry (SSI) has been raised from Rs. 1 crore to Rs. 1.5 crores.
    - Excise duty on biscuits reduced from 8% to 0% whose retail price does not exceed Rs. 100 per Kg.
    - Excise duty reduced from 8% to 0% on all kinds of food mixes including instant mixes.
    - Soya bari (food supplements) and ready to eat packaged foods fully exempt from excise duty.
    - Excise duty on reefer vans (refrigerated motor vehicles) reduced from 16% to 8%. Customs duty also cut.
    - Custom duty on food processing machinery reduced from 7.5% to 5%.
    - Custom duty on sunflower oil (crude) reduced from 65% to 50% and of sunflower oil (refined) reduced from 75% to 60%.
    - Special additional duty of 4% waived in the case of refined edible oil.
    - Central sales tax reduced from 4% to 3% from April, 2007.
    - All services provided by Technology Business Incubators exempted from service tax.
    - Similarly their Incubatees whose annual business turnover does not exceed Rs. 50 lakhs exempted from service tax for the first three years.

Growth Rate

The average rate of growth of food processing sector during the first four years of the 10th Plan period was @13.025% at current prices and @ 6.75% at 1999-2000 prices.

Plan Schemes

During the 10th Plan, the Ministry has been implementing Plan schemes for Technology Upgradation / Modernization / Establishment of Food Processing

Industries, Infrastructure Development, Human Resource Development, Quality Assurance, R&D and other promotional activities.

In the 11th Plan, it has been proposed to continue assistance to the above schemes with higher levels of assistance. The Planning Commission has allocated Rs. 250 crores to the Ministry for the Annual Plan 2007-08. In the 11th Plan, the Ministry proposes to launch a revamped Infrastructure Scheme under which it will promote setting up of Mega Food Parks, cold chain infrastructure, value added centres and packaging centres. The Mega Food Park Scheme will provide backward and forward linkages as well as reliable and sustainable supply chain. The emphasis will be on building strong linkages with agriculture and horticulture, enhancing project implementation capabilities, increased involvement of private sector investments and support for creation of rural infrastructure to ensure a steady supply of good quality agri horticulture produce. It will provide a mechanism to bring farmers, processors and retailers together and link agricultural production to the market so as to ensure maximization of value addition, minimize wastages and improve farmers income. The Mega Food Park would be a well-defined agri/horticultural-processing zone containing state of the art processing facilities with support infrastructure and well established supply chain. The primary objective of the proposed scheme is to facilitate establishment of integrated value chain, with processing at the core and supported by requisite forward and backward linkages. It is envisaged that the implementation of the projects would be assisted by professional project Management Agencies (PMA) from concept to commissioning. In 11th Plan it is planned to support establishment of thirty (30) Mega Food Parks in various parts of the country.

Vision 2015 on Food Processing Industries

A vision, strategy and action plan has also been finalized for giving boost to growth of food processing sector. The objective is to increase level of processing of perishable food from 6% to 20%, value addition from 20% to 35% and share in global food trade from 1.6% to 3%. The level of processing for fruits and vegetables is envisaged to increase from the present 2.2% to 10% and 15% in 2010 and 2015 respectively. The Cabinet has approved the integrated strategy for promotion of agri business-Vision, Strategy and Action Plan for the Food Processing Sector, based on the recommendations made by the Group of Ministers (GOM) for growth of Food Processing Sector.

Integrated Food Law

An Integrated Food Law, i.e. Food Safety and Standards Act, 2006 has been notified on 24.8.2006. The Act will enable in removing multiplicity of food laws and regulatory agencies and will provide single window to food processing sector. Ministry of Health & Family Welfare has been designated as the nodal Ministry for administration and implementation of the Act.

National Institute of Food Technology Entrepreneurship & Management (NIFTEM)

The Ministry has set up a National Institute of Food technology Entrepreneurship & Management (NIFTEM) at Kundli in the State of Haryana. The Institute will function as a knowledge centre in food processing. The Ministry has already taken possession of 100 acres of land from Haryana State Industrial Infrastructure

Development Corporation (HSIDC). Certificate of Incorporation of NIFTEM as a section 25 Company under the Companies act 1956 has been obtained. The work towards construction of a building for the Institute has been initiated. Meanwhile, the Institute will start functioning from a temporary premises.

SECTORAL OVERVIEW OF FOOD PROCESSING INDUSTRIES

FRUITS AND VEGETABLE PROCESSING

The installed capacity of fruits and vegetables processing industry has increased from 11.08 lakh tons on 01.01.1993 to 21.18 lakh tonnes as on 01.01.2006 and 24.74 lakh tonnes as on 01.01.2007. The utilization of fruits and vegetables processing is estimated to be around 2.20% of the total production.

Over the last few years, there has been a positive growth in ready to serve beverages, fruit juices and pulps, dehydrated and frozen fruits and vegetable products, tomato products, pickles, convenience veg-spice pastes, processed mushrooms and curried vegetables. The domestic consumption of value added fruits and vegetable products is also low compared to the primary processed food in general and fresh fruits and vegetables in particular which is attributed to higher incidence of tax and duties including that on packaging material, lower capacity utilisation, non-adoption of cost effective technology, high cost of finance, infrastructural constraints, inadequate farmers-processors linkage leading to dependence upon intermediaries. The smallness of units and their inability for market promotions are also other main reasons for inadequate expansion of the domestic market.

MEAT & MEAT PROCESSING

In meat & meat processing sector, poultry meat is the fastest growing animal protein in India. The estimated production is 1500 thousand tonnes growing at CAGR of 13% through 1991-2005. Per capita consumption has grown from 870 grams in 2000 to about 1.68 kg in 2005. This is expected to grow to 2Kg in 2009. Buffalo meat production has been growing relatively less rapidly at a CAGR of 5% in the last 6 years. The current production levels are estimated at 1.9 million MT; of this about 21% is exported. Mutton and lamb is a relatively small segment, where demand is outstripping supply, which explains the high prices in domestic market. The production levels have been stagnating at 950,000 MT with annual exports of less than 10,000 MT. This has restricted large processing companies from developing business interests in this sector.

Indian consumer prefers to buy freshly cut meat from the wet market, rather than processed or frozen meats. A mere 6% of production (about 100,000 MT) of poultry meat is sold in processed form. Of this only about 1% undergoes processing into value added products (Ready-to-eat / ready-to-cook), Processing of large animals is mostly for the purpose of Exports. The Total processing capacity in India is over 1 million MT per annum, of which 40-50% is utilized.

India exports more than 500,000 MT of meat of which major share is that of buffalo meat. Indian buffalo meat is witnessing strong demand in international markets due to its lean character and near organic nature.

Details of exports in terms of quantity and value of Meat products are given below:

Qty. in MTs & Value in Rs. Crs.

Meat product	2001-02 Qty.	Value	2002-03 Qty.	Value	2003-04 Qty.	Value	2004-05 Qty.	Value
Buffalo meat	243355.58	1144.42	29897.26	1305.45	343817.08	1536.77	306970.81	1615.59
Sheep / Goat meat	3915.06	33.07	4973.55	39.95	16820.53	110.39	8885.28	79.36
Poultry Products	19876.02	130.07	26450.01	156.47	415228.17	202.40	264607.54	154.11
Animal casings	464.28	9.63	8296.17	140.27	732.84	12.43	552.33	12.57
Processed Meat	267.13	1.29	669.48	4.8	986.13	7.63	107.45	1.57

Source : APEDA

India is the 5th largest exporter of bovine meat in the world. Indian buffalo meat exports have the potential to grow significantly. Due to emerging health threats of the diseases communicable to human through meat, the meat consumers are more vigilant towards the wholesomeness of the meat and demanding meat and poultry products processed in clean and sanitary environment. In metros and urban areas there are upcoming demands for ''convenience items'' such as semi cooked, ready-to-eat, ready-to-cook meat food products.

Processing of meat products is licensed under Meat Food Products Order, (MFPO) 1973 which is being implemented by Ministry of Food Processing industries w.e.f. 19.03.2004. The main objectives of the MFPO, 1973 are to regulate production and sale of meat food products through licensing of manufacturers, enforce sanitary and hygienic conditions prescribed for production of wholesome meat food products, exercise strict quality control at all stages of production of meat food products, fish products including chilled poultry etc.

To develop necessary infrastructure for processing of meat and meat food products for domestic market as well as for Export market, Ministry of food Processing Industries is providing financial assistance by way of grant-in-aid. During the Year 2006-07 MFPI assisted 7 projects for manufacture of Meat and Meat food products.

DAIRY PROCESSING

It is a matter of pride that India is the number one milk producing country in the world, maintaining the top position since 1988, thanks to successful implementation of the operation flood programmes. World milk production is estimated at 613 million tonnes growing at a CAGR of 1.1%. India ranks first in the world in terms of milk production. Indian production stands at 91 million tonnes growing at a CAGR of 4%. Hence, India contributes 4 million tones to the world's incremental production of 7.5 million tonnes. Despite a higher growth rate, the per capita availability of milk in India (229 grams per day) is lower than the world average (285 grams per day). Buffalo milk is estimated to account for 57% of the total milk production in India.

India has a unique pattern of production, processing and marketing / consumption of milk. Approximately 70 million rural households (primarily, small and marginal farmers and landless labourers) in the country are engaged in milk production. Over 11 million farmer are organized into about 0.1 million village Dairy Co-operative Societies (DCS) (about 110 farmers per DCS). The cumulative milk handled by DCS across the country is about 18 million kg of milk per day.

These co-operatives form part of a national milk grid which links the milk producers throughout India with consumers in more than 700 towns and cities bridging the gaps on account of seasonal and regional variations in the availability of milk.

In India current annual growth rate in Milk production is primarily due to the initiatives taken by the operation flood programmes in organizing milk producers into cooperatives; building infrastructure for milk procurement, processing and marketing, and providing financial, technical and management inputs by the Ministry of Agriculture & Ministry of Food Processing Industries to turn the Dairy sector into a viable self-sustaining organized sector. About 35% of milk produced in India is processed. In the organized sector, there are 676 dairy plants in the Co-operative, Private and Government sectors registered with the Government of India and the state Governments.

The Ministry of Food Processing Industries is promoting organized Dairy processing sector to accomplish upcoming demands of processed dairy products and helping to identify various areas of research for future product development and quality improvement to revamp the Indian dairy export by way of providing financial assistance to the dairy processing units. 32 Units have been sanctioned financial assistance (Rs. 591 lakhs) under the plan scheme of the Ministry during the year 2006-07 (Upto December 2006).

FISH PROCESSING

With its long coast line of over 8000 kms., 50600 sq. kms. of continental shelf area and 2.2 million sq. km. of Exclusive Economic Zone, India is endowed with rich fishery resources.

Fish production (both marine and inland) during last five years is given below:

(Figure in Million tonnes)

Year	Marine	Inland	Total
2000-01	2.81	2.84	5.65
2001-02	2.83	3.12	5.95
2002-03	2.99	3.21	6.20
2003-04	2.94	3.45	6.39
2004-05	3.01	3.50	6.51

Considerable infrastructure facilities for processing of marine products have been developed over a period of 50 years. At present, there are over 369 freezing units with a daily processing capacity of 10266 tonnes out of which 150 units are approved for export to EU. 499 units are engaged in production of frozen fish with a total storage capacity of 134767 tonnes. Apart from the above there are 12 surimi units, 5 canning units and 473 units are engaged in pre-processing and dry fish storage.

Ministry of Food Processing Industries extends financial assistance for setting up / technology upgradation / modernization of fish processing units, During the year 2006-07 (upto December 2006) 17 fish processing units have been assisted.

GRAIN PROCESSING

The grain processing industries include milling of rice, wheat and pulses. Financial assistance has been provided for setting up / modernization / expansion of the units

before their commissioning. The question of providing financial assistance under the Plan Scheme for setting up / modernization in the grain / rice / pulses / flour milling sector has been reviewed. It was felt that priority should be given to processing and enhancing shelf life of perishable items so as to reduce wastage and encourage value addition in that sector. Considering that rice / pulses / flour are consumed in the processed form only and primary processing in these sectors adds little to shelf life, wastage control and value addition, it has been decided not to accept fresh proposal for these sectors, viz. Rice, Flour & Pulse Milling from the financial year 2004-05. However complete and viable cases relating to rice mill, flour mills and pulses received by SNA till 31.03.2004 subject to prescribed conditions have been considered on merit for assistance.

A Technical Committee had been constituted to review and make recommendation on benchmarks for latest and most efficient technology and processes and identification of minimum conditions to be laid down for assistance to rice / pulses / flour / oil sector. The committee has submitted its report, which has been accepted by the Ministry. These have been incorporated in the guidelines for the financial institutions for providing assistance keeping in view the value additions and technological benchmarks.

During 2006-07 (upto December 2006), the Ministry sanctioned financial assistance for 32 rice milling, 13 flour milling 62 edible oil milling and 13 pulse milling units.

CONSUMER FOOD INDUSTRIES

Consumer Food Industry includes pasta, breads, cakes, pastries, rusks, buns, rolls, noodles, corn flakes, rice flakes, ready to eat and ready to cook products, biscuits etc. Bread and biscuits constitute the largest segment of consumer foods. Their production is about 4 million tonnes per year. Manufacturing of bread is reserved for SSI sector. Out of the total production of bread, 40% is produced in the organized sector and the remaining 60% in the unorganized sector. Similarly, production of biscuits in the organized sector is about 80% and quantity of biscuits produced in the unorganized sector is about 20%.

During the year 2006-07 (upto January 2007) 75 food-processing units relating to consumer industries were sanctioned financial assistance by MFPI and Rs. 16.34 crore has been released so far.

AERATED SOFT DRINK

The soft drinks constitute the 3rd largest packaged foods regularly consumed after packed tea and packed biscuits. The aerated soft drinks industry in India comprises over 100 plants across all states. It provides direct and indirect industry related employment to over 125,000 employees. It has attracted one of the highest foreign direct investments in the country. It has strong forward and backward linkages with glass, plastic, refrigeration, sugar and transportation industry. Installed capacity of sweetened / aerated water as on 01.01.2006 is reported to be 29.60 lakh tons per annum.

PACKAGED DRINKING WATER

There are 218 companies, which have been granted licence for manufacturing packaged drinking water and packaged natural mineral water. There has been a

spurt in growth for the last 3-4 years, which can largely be attributed to a range of various packaged sizes to suit the consumers. 80% of the packaged water sale comes from the bulk containers (5 litres and above).

ALCOHOLIC BEVERAGES

India is the third largest market for alcoholic beverages in the world. The demand for spirits and beer is estimated to be around 373 million cases. There are 12 joint venture companies having a licensed capacity of 33919 Kilolitres per annum for production of grain based alcoholic beverages. 56 units are manufacturing beer under licence from the Government of India. The wine industry in India provides considerable opportunities for value addition and employment generation in the agro-processing sector. The Ministry has sanctioned a wine park at Venture, Nasik.

CONSUMER AFFAIRS

PRICE MANAGEMENT

The prices of essential commodities in the country generally exhibited a rising trend during the year 2006-07. The annual rate of inflation in terms of Wholesale Price Index (WPI) recorded an increase of 6.6% during the year 2006-07 as compared to 3% in the corresponding period a year ago. The increase in the inflation rate in the year was mainly attributed to increase in prices of some essential commodities like cereals, pulses and edible oils. Government has given high priority to checking the rise in prices of essential commodities. Prices of essential commodities are being closely monitored and reviewed at high levels in the Government. Commodities which are in short supply such as wheat and pulses are being imported to supplement the domestic availability. As a result of appropriate measures taken by the Government, the rising trend in the WPI-based rate of inflation had been contained within reasonable levels and the year ended (31.3.07) with a point-to-point inflation of 5.7%. In the case of Consumer Price Index for Industrial Workers (CPI-IW), the annual inflation rate for the year 2006-07 was higher at 6.72% as compared to 4.95% in 2005-06.

During the year 2006-07, monitoring of the retail prices of 14 essential commodities, viz. rice, wheat, atta, gram dal, arhar dal, sugar, milk, groundnut oil, Mustard oil, Vanaspati, salt, tea, potato and onion was regularly carrier out by the Department of Consumer Affairs on a daily basis. The wholesale prices of these commodities is monitored on a weekly basis covering 37 centres. The High Powered Price Monitoring Board (HPPMB), the Cabinet Committee on Prices (CCP) and Committee of Secretaries (COS) reviewed the prices and availability position of essential commodities at regular intervals, based on the agenda note on ‘General Prices Situation and Availability of Essential Commodities’ prepared by the Price Monitoring Cell (PMC) of the Department of Consumer Affairs. The HPPMB, CCP and COS meet periodically to review the price and availability scenario of essential commodities and directs concerned Ministries / Departments to take appropriate and necessary remedial action.

Movements in the Wholesale Price Index (WPI) number during 2006-07 indicated that WPI of Manufactured Products with a higher weight of 63.75 per cent in the overall index basket increased by 6.7% per cent, while the index number of Fuel, Power, Light and Lubricants with a lower weight of 14.23 per cent rose by 1.4 per cent. In the case of Primary Articles having a weight of 22.03 per cent, the increase was 11.8 per cent during the period under review.

COMMODITY-WISE PRICE TRENDS

Cereals

The WPI of Cereals increased by 7.3% during 2006-07 mainly due to increase of ragi 20.7%, 19.7% in maize, 10.1% in jowar, 8% in barley, 7.2% in wheat, 6.7% in bajara and 5.8% in rice. The production of total cereals for 2005-06 (final) was higher at 195.20 million tomes as compared to 183.23 million tonnes in 2004-05. Production of rice and wheat were also higher at 91.79 million tonnes and 69.35 million tonnes during 2005-06 as compared to 83.13 million tonnes and 68.64 million tonnes respectively in the previous year. As per the 3rd Advance Estimates released by the Department of Agriculture and Cooperation, production of rice and wheat likely to be higher at 91.05 million tonnes and 73.70 million tonnes respectively during 2006-07. The main reason for higher prices of wheat during 2006-07 was a decline in domestic production coupled with global shortfall and hardening of international pieces.

Pulses

Wholesale Price Index (WPI) of pulses exhibited an increase of 15.20% during 2006-07 which was lower than the rise of 78.7% in 2005-06. Among individual items, increase was recorded in the range of 10.5% (arhar) to 19.4% (moong) during the period. This price rise was mainly attributed to shortfall in domestic supplies relative to demand and hardening of international prices. Though production of pulses during 2005-06 reached 13.39 million tonnes from 13.13 million tonnes in the previous year and during 2006-07 is estimated to be marginally higher at 14.10 million tonnes according to 3rd Advance Estimates, yet the increase is limited. The demand of pulses is estimated at 17.71 million tonnes during 2006-07 as against 17.38 million tonnes in previous year based on the demand projections for the Tenth Five Year Plan prepared by a Working Group of the Planning Commission using normative approach. In order to bridge the gap in the demand and availability of pulses, imports have been encouraged. Import of pulses during 2006-07 was 2.2 million tonnes (provisional) as compared to 1.7 million tonnes in 2005-06.

Edible oils

Wholesale Price Index (WPI) of edible oils exhibited an increase of 13.9% during the financial year 2006-07 as against a decline of 3.5% in 2005-06 mainly due to decline in the domestic production of oil seeds and hardening of international prices. According to 3rd Advance Estimates 2006-07 the production of edible oilseeds has been estimated to be lower at 23.26 million tonnes as compared to the production of 27.98 million tonnes in 2005-06. Among major edible oils, prices of groundnut oil increased by 33.9%, mustard oil by 13.5% vanaspati by 7.6%, coconut oil 4.9% and gingelly oil by 20.4% during the period under review. Imports of edible oil during 2006-07 (April-February) were 3.8 million tonnes as compared to 3.91 million tonnes during the corresponding period last year.

Sugar

Sugar prices have declined during the year 2006-07 mainly due to an increase in availability in the markets. In terms of WPI, the prices of sugar declined by 13.2% during 2006-07 as compared to the increase of 6.8% a year ago. The production of sugar has increased to 193.21 lakh tonnes during 2005-06 sugar season from 136.60 lakh tonnes a year ago. During 2006-07 sugar year, production is likely to be 227.34

lakh tonnes. The production of sugarcane, as per the third Advance Estimates of production for 2006-07 is estimated to be higher at 322.94 million tonnes compared to 281.17 million tonnes.

Tea

The prices and availability of tea in the country remained satisfactory. Though the WPI of tea rose by 8% during 2006-07 as compared with the decline of 0.4% during 2005-06, the prices at the retail level indicated a steady trend. The retail prices and availability of tea indicated a steady trend during the period under review. Exports of tea during 2006-07 (April-February 07) were 1747.20 lakh kg as against 1515.21 lakh kg in the corresponding period a year ago.

VEGETABLES

ONION

Vegetable prices are subject to variations depending on the availability and seasonal factors. Government has kept a close watch on the prices and availability of vegetables especially onion and potato. During the financial year 2006-07 prices remained at lower levels (as compared to last year) till the mid of December 2006, when some signs of increase was reported. Prices peaked in January 2007 due to heavy export demand particularly from neighbouring countries such as Pakistan, Sri Lanka and Bangladesh. However, the timely measures taken by NAFED by way of increasing MEP (Minimum Export Price) and instructing all the STEs to issue an NOC for exports only, led to a reduction in prices of onion. Production of onion during 2006-07 was 6.67 million tonnes against 6.22 million tonnes during the previous year.

POTATO

The first signs of increase in prices of potato were registered in the beginning of July 2006 and reached to peak level during the month of October 2006, in almost all the markets, as only stored potato was available during this time from cold storages. New crop of potato from Karnataka and Himachal Pradesh started arriving from November 2006 in the Azadpur Mandi, Delhi. Potato arrivals increased by third week of November from the States of Bihar, Uttar Pradesh, Uttaranchal, Punjab, Gujarat and Haryana. Since then, prices of potato have eased in various markets across reporting centres.

Production of potato during 2006-07 was 27.02 million tonnes against 26.88 million tonnes last year.

STEPS TO CONTROL PRICES

Government has already taken steps to arrest the increase in prices by taking measures such as augmenting domestic supplies of wheat and pulses through imports at reduced rates of duty and ban on exports of pulses and wheat, which are as follows :

(i) State Trading Corporation contracted for import of 55 lakh tonnes of wheat to supplement domestic availability during 2006-07. Government also to import 1 million tonnes of wheat in suitable trenches by July 2007 to augment the buffer stocks of the Government.

(ii) Period of validity of import of wheat at zero duty was extended up to 31.12.07.

Government decided to release in February and March, 2007, utpo 4 lakh tonnes of wheat under the Open Market Sale Scheme (Domestic).

Export of wheat has been banned w.e.f. 09.02.2007. The ban will remain in force up to 31.12.2007.

Customs duty on import of pulses was reduced to zero on June 8, 2006 and the period of validity of import of pulses at zero duty has been extended from 31.3.07 to 1.8.2007 and further to 31.3.09.

A ban was imposed on export of pulses with effect from June 22, 2006 (except export of Kabuli chana w.e.f. 7.3.07). The period of validity of prohibition on exports of pulses which was initially upto 31.3.07 was further extended upto 31.3.2008, vide DGFT Notification dated 9.3.2007.

At the initiative of the Government, National Agricultural Co-operative Marketing Federation of India Ltd. (NAFED) executed a contract for import of 49,300 MTs of pulses during 2006-07.

NAFED PEC Ltd., MMTC and STC would target to import 1.5 million tonnes of pulses during 2007-08.

Import duty on palm group of oil was reduced initially by 10 percentage points in August 2006 and by a further 10-12.5 percentage points in January 2007. W.e.f. 1.3.07, the import duty on sunflower oil, both crude and refined, has been reduced by 15 percentage points and the duty now stands at 50%-60%. Import duty on sunflower oil was reduced earlier by 10 percentage points in January 2007.

With effect from 13.4.07, the import duty on palm group of oils has been further reduced by ten percentage points, making the import duty on crude palm oil (CPO) at 50% and that on refined palm oil at 57.5%. The Government has also withdrawn the 4% additional countervailing duty on all edible oils. As a consequence, import duty on crude palm oil has been brought down to 50% from the level of 80% prior to 11.8.2006.

Forward Markets Commission (FMC) vide letter dated 23.01.07 has directed the three National Exchanges, namely : (a) Multi Commodity Exchange of India Ltd., (b) National Commodity & Derivatives Exchange Ltd., and (c) National Multi Commodity Exchange of India Ltd., to delist all contracts of tur and urad and to close out all outstanding positions in all Tur and Urad contracts at the closing price on 23.01.07. FMC has also stated that no further contract shall be launched without its prior approval and permission already granted to launch contracts in Urad and Tur stands withdrawn.

FMC has on 27.2.2007 directed all the three National Exchanges that no new wheat and rice contracts be launched. In the letter to the Exchanges, FMC has stated that permission already granted for yet to be launched contracts stands revoked and that in respect of running contracts in these commodities no new position should be allowed to be taken. Only squaring up of positions should be allowed.

To contain volatility in the futures prices of wheat, sugar, pulses, etc. Forward Markets Commission (FMC) has taken required regulatory measures such as imposition of limits on open position, reduction in limits on daily price fluctuations and imposition of additional / special margins.

In general, efforts to increase the production and imports of deficit items to supplement the availability coupled with a close watch on the price behavior have

had a favourable impact on the prices and availability of essential commodities during the year 2006-07.

WEIGHTS AND MEASURES

One of the important reforms undertaken in the country after Independence was the standardisation of the system in weights and measures. Uniform standards of weights and measures, based on the metric system, were established in the country, under the Standards of Weights and Measures Act, 1956.

In order to establish the international system of units and to align our laws with international practices as well as to remove certain deficiencies, a comprehensive legislation, namely, the Standards of Weights and Measures Act, 1976 was enacted, replacing the 1956 Act. The 1976 Act contains among other things, provisions for regulation of pre-packed commodities sold to consumer so as to establish fair trading practices. Provisions of the Act relating to packaged commodities and the relevant rules, namely, the Standards of Weights and Measures (Packaged Commodities) Rules, 1977 were brought into force, since September 1977. According to these provisions every package intended for retail sale is required to carry information as regards the name of the commodity, name and address of manufacturer or packer, net quantity, month and year of manufacture / packing and retail price. Mandatory declaration of retail sale price is to be given in the form "MRP Rs. inclusive of all taxes". The entire Rules were reviewed to make it simple & transparent and amended vide notification GSR 425(E) dated 17-7-2006. In the interest of consumers, inter alia, the following new provisions have been incorporated : 1) Retail dealers covered under Value Added Tax (VAT) and Turn Over Tax (TOT) and dealing in packaged commodities whose net content is by weight or volume or a combination there of have to maintain appropriate electronic weighing instrument with facility to issue printed receipt showing the weight of packages free of cost so that consumers can check the weight of packaged commodities purchased from the shop. 2) Every package shall bear names & address, Tel. No., e-mail (if available) of the person or the office which can be contacted in case of consumer complaints. The Rules have similar provision for regulation of packaged commodities imported into India like indigenous packages.

Under the provisions of the 1976 Act, the models of all weighing and measuring instruments should be approved before commencement of their production. Under the relevant rules, namely, the Standards of Weights and Measures (Approval of Models) Rules, 1987 recognised laboratories examine the models for their conformity to the standards. These Rules are in force since 1987.

The Forty-second Amendment of the Constitution brought the subject of 'Enforcement of Weights and Measure' from the 'State List' to the 'Concurrent List'. To ensure uniformity in the matter of enforcement in the country, a Central Act, namely, the Standards of Weights and Measures (Enforcement) Act, 1985 was brought into force. It contains provisions for effective legal control on weights, measures and weighing / measuring instruments used in commercial transaction, industrial production and in protection involving public health and safety.

Two Bills for amending the Weights and Measures Acts were introduced in Rajya Sabha in March 2005. The bills contain many proposals to make the system more transparent, outsourcing of verification activities of some of the sophisticated weights and measures and for uniform enforcement across the country.

On the recommendation of the Parliamentary Standing Committee, a unified legislation combining the existing two legislations on Weights and Measures (mentioned above) has been mooted.

India is a member of the International Organisation of Legal Metrology (OIML). This Organisation was set up in order to realize worldwide uniformity in laws relating to legal metrology (weights and measure) and to make international trade smooth and practical.

Legal standards of weights and measures of the States and Union Territories are calibrated in the four Regional Reference Standard Laboratories (RRSL) located at Ahmedabad, Bhubaneswar, Bangalore and Faridabad. These laboratories also provide calibration services to the industries in their respective regions. They are among the recognised laboratories for conducting the model approval tests on weights and measuring instruments. The scheme for establishing one more RRSL at Guwahati to cater to the needs of North-Eastern States, commenced in the Ninth Plan, is underway.

Under a scheme to strengthen legal metrology laboratories of States, infra-structure assistance in the form of standard balances and a mobile kit for testing weighbridges is being provided by the Department to all States / Union Territories, for better enforcement.

During 2005-007 an amount of Rs. 8.1 crore was given to States / UTs as grant in aid for purchase of working Standard Balances. Supply of 59 sets of Secondary Standard Balances and 34 No of Mobile kits for testing weighbridges is under way and is likely to be completed by July, 2007 and March, 2008 respectively.

The Indian Institute of Legal Metrology, Ranchi, under the administrative control of this Ministry, imparts training in legal metrology and allied subjects. Apart from the enforcement officials of States, nominees from African, Asian and Latin American countries also attend the programmes run by the Institute. To re-orient the activities of the Institute so as to fulfil its mandate more effectively and to make it a centre of excellence, a study has been entrusted to Indian Institute of Management, Kolkata.

NATIONAL TEST HOUSE

The National Test House (NTH) with its headquarters at Kolkata is a Government laboratory of national importance in the field of testing and evaluation of material and products of all engineering branches except Food, Pharmaceuticals and Arms and Ammunitions. It is also providing calibration services and actively assists BIS in the formulation of National Standards since independence. The objective of NTH is to improve Indian Products to meet the requirements of National / International Standards for their acceptability in the global market. The NTH with its headquarters in Kolkata functions through six regional laboratories located in Kolkata, Mumbai, Chennai, Ghaziabad, Jaipur and Guwahati.

15 Health and Family Welfare

THE Tenth Plan period witnessed a transition in health care policies and strategies with the effecting of an architectural correction in the healthcare delivery system at the primary and secondary level and the steps taken to set in motion regional balance in the availability of tertiary healthcare facilities. Wide ranging reforms and policy initiatives have been taken for improving health infrastructure and addressing the healthcare needs of the population. Several initiatives have also been undertaken on the disease front to contain morbidity and mortality.

Healthcare is one of the 7 thrust areas under the National Common Minimum Programme (NCMP) and improvement in health continues to be an important part in the overall strategy for socio-economic development over the planning period. The special focus given to Health Sector in the NCMP has formed the core of the programmes formulated under both Health and Family Welfare. The National Rural Health Mission (NRHM) is the key plank for giving effect to the mandate of the NCMP. The NRHM also provides an overarching umbrella to the existing programmes of Health & Family Welfare including RCH-II, Vector Borne Disease Control Programme, TB, Leprosy, NPCB and the Integrated Disease Surveillance Project. It also addresses the issue of health in the context of a sector wide approach encompassing sanitation and hygiene, nutrition and safe drinking water as basic determinants of good health and also advocates greater convergence with related social sector Departments. The core strategies of the Mission include identification and selection of the Accredited Social Health Activist (ASHA), decentralized planning, strengthening of existing infrastructure like sub-centres, PHCs and CHCs, adoption of a sector wide approach, flexible financing, community participation, manpower development and partnership with non-government stakeholders. Maternal and child health will be given a basic thrust on the programme front. Monitoring would be community based and through stringent internal reviews and external surveys.

The Pradhan Mantri Swasthya Suraksha Yojana is a major initiative for developing tertiary healthcare in the country, particularly to enable the availability of such facilities on a regional basis. It is also expected to reduce imbalance in human resources development by providing health care services through establishment of medical colleges and an improved delivery of services. Under PMSSY, 6 AIIMS like institutions are to be set up and 13 medical colleges upgraded.

To tackle the menace of other communicable and non-communicable diseases, the Ministry of Health and Family Welfare continues to implement National Health Programmes throughout the country for Blindness, AIDS, Cancer, Mental Disorders, etc. A Disease Surveillance mechanism is also being put in place for communicable and non-communicable diseases and their risk factors to facilitate quick response and evaluate control strategies. Central Institutions and organisation engaged in health care, medical education and research are continuously being strengthened to tackle the emerging diseases.

The general condition of India's population has improved significantly since the 1990s. The Average life expectancy at birth has increased from 59.7 years in 1991 to 63.7 years for males and 60.9 to 66.9 years during the same period for females.

Graph

Infant mortality, Crude birth rate and death rates have also registered a decline during the period. The strategies put in place in respect of the communicable diseases particularly leprosy and TB has met with sufficient success. In the case of Vector borne Diseases, concerted efforts are being made under the programme while under AIDS, the key strategy has been to build up infrastructure and go in for targeted interventions.

The major areas of current focus include continued high morbidity due to communicable diseases, rising disease burden due to non-communicable diseases and nutritional problems. The unmet need for contraception and high unwanted fertility are the other areas of major concern.

NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME

The Directorate of National Vector Borne Diseases Control Programme is the national nodal agency for prevention and control of major vector borne diseases of public health importance namely Malaria, Filaria, Kala-azar, Japanese Encephalitis (J.E.),Dengue / Dengue Hemorrhagic fever (DHF) and Chikungunya.

MALARIA

Malaria is an acute parasitic illness caused by Plasmodium falciparum or Plasmodium vivax. Mosquitoes, of which there are 9 major species, transmit malaria in India. The main clinical presentation is fever with chills, nausea and headache. The diagnosis is confirmed by microscopic examination of a blood smear. Majority of the patients recover from the acute episode within a few days following treatment. If treatment is not available in time, the condition of the patients with P.falciparum can deteriorate rapidly. At the time of independence, there were an estimated 75 million malaria cases and 0.8 million deaths annually. GOI launched the National Malaria Control Programme (NMCP) in 1953. DDT spraying resulted in a sharp decline in the incidence of malaria in all areas under spray. In 1958, NMCP was converted to the National Malaria Eradication Programme (NMEP) with a view to eradicate malaria from the country. The strategy was highly successful and the cases were reduced to about one lakh and deaths due to malaria were eliminated by 1965-66. However, operational, financial and administrative constraints led to a countrywide increase in the number of cases after 1967.

In 1977 the Modified Plan of Operation (MPO) was launched with the immediate objectives of preventing deaths and to reduce morbidity due to malaria. The programme was integrated with the primary health care delivery system. The blanket approach of insecticidal spraying was changed to selective indoor residual spray by stratifying areas based on cases per 1,000 populations in a year i.e. the Annual Parasite Incidence (API) of 2 and above. The cases were reduced subsequently from 6.47 million in the year 1976 to around 2.5 to 3 million cases annually till 1996. Since 1997, a declining trend has been recorded. API declined to less than 2 million for the first time in 2002 and since then it is reported to be less than 2 million.

The areas vulnerable to malaria are largely tribal, difficult, remote, forested and forest fringe inaccessible areas with operational difficulties. The high transmission areas are the North Eastern States and largely tribal areas of Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Orissa and Rajasthan.

Government of India, in addition to the technical inputs, provides drugs, insecticides and larvicides under the National Vector Borne Disease Control

Programme. The State governments are responsible for the planning, implementation, supervision and monitoring of the programme. North Eastern states are being provided 100 per cent support by GoI for implementation of the programme including operational cost.

A Grant Agreement was signed with Global Fund for AIDS, Tuberculosis and Malaria (GFATM) on 27 June 2005 for the implementation of Intensified Malaria Control Project (IMCP) in NE States (except Sikkim), selected high risk areas of Orissa, Jharkhand and West Bengal with the objectives to increase access to rapid diagnosis and treatment in remote and inaccessible areas through community participation and to encourage use of bed nets treated with insecticides to reduce the risk of malarial transmissions (ITNs) and enhance awareness about malaria control and promote community, NGO and private sector participation.

In a 100 districts in 8 states namely Andhra Pradesh, Chhattisgarh, Jharkhand, Gujarat, Madhya Pradesh, Maharashtra, Orissa and Rajasthan, 1045 PHCs predominantly inhabited by tribals were also provided 100 per cent support including operational expenses under the Enhanced Malaria Control Project (EMCP) with World Bank assistance, since 1997. Govt. of India is presently in the process of negotiating with the World Bank for the 2nd phase of the programme (VBDCP) for a period of 5 years. To bridge the gap between the new VBD Programme and to sustain malaria control activities in the erstwhile EMCP states, the World Bank has provided retroactive financing till the new Vector Borne Disease Control Programme is approved.

The Malaria situation in the Country since 1996 to date is as follows:

Year	Cases (in million)		Deaths	API*
	Total	Pf		
1996	3.04	1.18	1010	3.48
1997	2.66	1.04	879	2.86
1998	2.22	1.03	664	2.44
1999	2.28	1.14	1048	2.41
2000	2.03	1.05	932	2.09
2001	2.09	1.01	1005	2.06
2002	1.84	0.89	973	1.80
2003	1.87	0.85	1006	1.82
2004	1.92	0.89	949	1.84
2005	1.81	0.81	963	1.80
2006	1.67	0.75	1487	1.66
2007 (Upto June)	0.18	0.08	210	

* Annual Parasite Incidence (API) is the number of laboratory confirmed cases per 1000 population

FILARIA

Lymphatic Filariasis is a serious debilitating and incapacitating disease. The transmission of filaria is through mosquitoes called Culex quinquefasciatus. The infected person may develop swellings of limbs and genitals which keep on increasing, making the person incapacitated and suffering from social stigma as well. The person also suffers from frequent attacks of lymphangitis, i.e., high fever, swelling and pain. There is no cure at this stage and the person is forced to live with huge swellings prone to secondary infections. This disease has been reported from over 250 districts in 20 States and UTs wherein over 500 million people live.

The National Health Policy (2002) has envisaged a goal of Lymphatic Filariasis Elimination from the country by the year 2015. In pursuance to this, Govt. of India launched the campaign of an annual mass drug administration (MDA) with a single dose of Diethycarbamazine citrate tablets - the antifilaria drug in the year 2004, to the eligible population living in the risk of lymphatic filariasis. In the year 2004, 202 endemic districts of 20 states in the country with a population of 276.2 million were covered against eligible population of 380.2 million indicating the coverage rate of 72.6%. In 2005, 346.89 million population was covered against eligible population of 434.49 million in 229 districts indicating the coverage rate of 79.84%. MDA-2006 has been observed in 14 states / UTs. Out of this, reports have been received from 11 states / UTs indicating that 94.96 million population was covered against 112.86 million targeted population (84.14%).

DENGUE FEVER / DENGUE HAEMORRHAGIC FEVER

Dengue fever is a viral disease, which is transmitted by the Aedes aegypti mosquitoes. The Aedes mosquitoes breed in clean water in man made containers such as water coolers, discarded tyres, disposable cups, flower vases and other water storage containers. The first out break of Dengue fever / DHF was reported from Kolkata in 1963. All the four serotypes of dengue are prevalent in India. Dengue viral infection may remain asymptomatic or manifest either as undifferentiated febrile illness (viral syndrome), Dengue Fever (DF) or Dengue Hemorrhagic Fever (DHF).

However, in recent years, Dengue is increasingly being reported from peri-urban and rural areas, due to expanding urbanization and lifestyle changes. The most affected areas are West Bengal, Delhi, Kerala, Tamil Nadu, Gujarat, Karnataka, Maharashtra, Rajasthan, Punjab and Haryana. During 2005, 11985 cases and 157 deaths were reported, mainly on account of an outbreak in West Bengal. During 2006, 12317 cases with 184 deaths, during 2007 upto May, 245 cases with 2 deaths have been reported. As there is no specific treatment for Dengue, the emphasis is on avoidance of mosquito breeding conditions in homes, workplaces and minimizing the man-mosquito contact. Community awareness and participation as well as inter-sectoral collaboration are crucial for effective control of Dengue. In addition, enactment and enforcement of appropriate Civic bye laws and Building bye laws should also stressed upon in all urban areas to prevent mosquitogenic conditions in line with the Delhi, Mumbai, Goa, Chandigarh health administrations.

CHIKUNGUNYA

Chikungunya is a debilitating non-fatal viral illness which has occurred in outbreak form in India during 2006 after a gap of 32 years. It resembles dengue fever. It is caused by Chikungunya virus. It is spread by the bite of female Aedes mosquitoes, primarily Aedes aegypti. Humans are considered to be the major source or reservoir

of Chikungunya virus for mosquitoes. Therefore, the mosquitoes usually transmit the disease by biting infected persons and then biting others. The infected person cannot spread the infection directly to the other person. During 2006, 1.39 million suspected Chikungunya fever cases were reported from the country with no death. During 2007 a total of 21247 suspected Chikungunya fever cases and Nil death have been reported till 25th June, 2007.

JAPANESE ENCEPHALITIS

Japanese Encephalitis is an acute viral illness with high case fatality and long term complications. The vector breeds in large paddy fields and similar large water bodies. The vector is an outdoor rester and feeder. This habit of the vector mosquito makes the control strategy difficult. J.E. has acquired serious magnitude in the states of Uttar Pradesh, Andhra Pradesh, West Bengal, Assam, Tamil Nadu, Karnataka, Kerala, Bihar, Goa, and Haryana. During 2005, there was an epidemic outbreak in Uttar Pradesh which increased the total number of cases to 6727 and deaths to 1682. During 2006, so far 2832 suspected cases of JE / viral encephalitis have been reported with 658 deaths. During 2007 (upto May) 102 cases and 28 deaths have been reported. There is no specific treatment for JE. Efforts were being made by states and Govt of India to contain JE outbreaks by instituting various public heath measures including selective JE vaccination. Considering the value of vaccination in prevention of JE, the Govt of India has launched a JE vaccination programme during 2006 for children between 1 and 15 years of age in 11 districts of the 5 states of Uttar Pradesh, Bihar, Assam, Karnataka and West Bengal. This has been made an integral component of Universal immunization Programme. Other endemic districts will also be covered with JE vaccination in a phased manner using single dose live attenuated SA-14-14-2 vaccine.

KALA-AZAR

Kala-azar is a parasitic disease caused by Leishmania donovani transmitted by sandflies Phlebotomus argentipes. The disease is prevalent among socio-economically poorer sections of the society living in rural areas. The infected person suffers from recurrent fever, loss of appetite, loss of weight and progressive enlargement of spleen. The disease is chronic and if not treated, as leads to death. Kala-azar is endemic in Bihar, Jharkhand, West Bengal and parts of Uttar Pradesh. The Central Government initiated of Kala-azar control Programme from 1990-91 incorporating assistance in kind provided for procurement of insecticides and anti-leishmanial drugs. The National Health Policy 2002 has envisaged a goal of Kala-azar Elimination by the year 2010. The disease incidence has come down from 77,099 cases in 1992 to 39179 cases in 2006 and deaths from 1,419 to 187, respectively. During 2007 (updated in July) 17129 cases and 78 deaths have been reported. To pursue the goal of elimination of Kala-azar by the year 2010, the Govt of India is providing 100% support to endemic states since 2003, apart from regular technical guidance. Timely and quality Indoor Residual Spraying with DDT for vector control, complete treatment of patients as well as intensive social mobilization are being stressed upon. For detection of cases, Kala-azar fortnights are being advocated through house to house visits. As the diagnostic procedure at present is clinic based and complex, the Govt of India has introduced Rapid Diagnostic Test rK39, which can be used by trained peripheral Health Workers. The treatment of Kala-azar at present is also long and injection based, which affects treatment compliance. To improve compliance, the Govt of India has decided to introduce oral drug miltefosine in the programme, particularly for remote and inaccessible areas.

TUBERCULOSIS

Tuberculosis is a major public health problem in India. India accounts for one-fifth of the global TB incidence and is estimated to have the highest number of active TB cases amongst all the countries of all the World. Every year there are approximately 18 lakh new cases in the country of which approximately 8 lakh are new smear positive and therefore infectious. Each sputum positive case if not treated, on an average, infects 10-15 persons in a year. Two persons die from TB in India every three minutes-more than 1,000 people every day.

To control TB, National Tuberculosis Control Programme (NTCP) has been in operation in the country since 1962. This could not achieve the desired results. Therefore, it was reviewed by an expert committee in 1992 and based on its recommendations, Revised National TB Control Programme (RNTCP), which is an application to India of WHO-recommended strategy of Directly Observed Treatment Shortcourse (DOTS), was launched in the country on 26 March 1997. The objectives of RNTCP are (i) to achieve and maintain a cure rate of at least 85% among newly detected infectious TB cases and (ii) achieve and maintain detection of at least 70% of such cases in the population. RNTCP was implemented in the country in a phased manner and by 23rd March 2006 the entire country has been covered under RNTCP. The Programme is being implemented with assistance from World Bank, DFID, USAID, GDF and GFATM.

Overall performance of the RNTCP for the country has been excellent with cure / treatment completion rate consistently above 85% and death rate among patients registered for treatment reduced to less than 5%. More than ninety per cent of the new smear-positive cases detected are being put under DOTS. Till date, the RNTCP has placed more then 70.73 lakh patients under treatment, averting more than 12.73 lakh deaths. Every month, more than 1,00,000 patients are placed under treatment. In 2006 alone, India placed around 14 lakh cases on DOTS, more than any country in a single year in the world. The Programme envisages to develop an effective partnerships with the health care provider outside the public health system including NGOs, Private Practitioners (PPs), Corporate sectors etc. Treatment of MDR-TB patients by following DOTS-Plus strategy has been launched in the States of Gujarat and Maharashtra in early 2007 and will be extended to the entire country in a phased manner

National Leprosy Eradication Programme

Government of India launched the National Leprosy Control Programme in 1955 based on Dapsone monotherapy. Multi Drug Therapy (MDT) came into wide use from 1982 and the Programme was re-designated the National Leprosy Eradication Programme (NLEP) in 1983. The programme was expanded with World Bank assistance and the 1st phase of the World Bank supported National Leprosy Elimination Project started from 1993-94 and ended in March 2000. The 2nd phase of World Bank supported National Leprosy Elimination Project started from April 2001 and ended successfully in December 2004. During the 2nd phase, NLEP was decentralized to States / Districts and Leprosy Services were integrated with the General Health Care System. Since than, free Multi Drug Therapy (MDT) is available at all Sub-Centres, PHCs and Government Hospitals and Dispensaries on all working days.

Five nation-wide Modified Leprosy Elimination Campaigns (MLEC) have been conducted from 1998 to 2003, to create mass community awareness about leprosy

and to undertake a leprosy case detection drive with prompt MDT, during which more than 9.90 lakh leprosy cases were detected and treated with MDT .

The National Health Policy, 2002 had set the goal of elimination of leprosy (i.e., to reduce the number of cases to <1 / 10,000 population) by the year 2005. India has achieved this goal of elimination of leprosy as a public health problem at the national level in the month of December 2005, when the recorded Prevalence Rate (PR) in the country was 0.95 / 10,000 population. By March 2007, the prevalence rate of leprosy in the country had declined to 0.72 per 10,000 population and 28 states / UTs have achieved the goal of leprosy elimination. The remaining 7 States / UTs viz. Bihar, Chhattisgarh, Jharkhand ,West Bengal, Chandigarh, D&N Haveli and Delhi are having PR of >1 per 10,000 population and are progressing towards elimination. Out of 611 districts, 487 (79.71%) districts have achieved the elimination status. As a result of intensive IEC activities, public awareness about the disease and its curability has increased significantly and the stigma and discrimination against leprosy affected persons has declined appreciably. Concerted community mobilization is still required to reduce it further.

The programme will continue the efforts to achieve elimination of leprosy in the remaining states and districts through existing MDT services, capacity building of health service staff and strengthening of monitoring and supervision of the programme. The focus will also be on an enhancing Disability Prevention and Medical Rehabilitation (DPMR) services by involving more Medical Colleges and PMR Institutions and Inter-sectoral collaboration for rehabilitation of leprosy disabled persons.

NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS

The National Programme for Control of Blindness (NPCP) was launched in the year 1976 with the goal of reducing prevalence of blindness to 0.3 percent. The main causes of blindness include Cataract, Refractive Errors, Corneal Blindness, Childhood Blindness, Glaucoma and Diabetic Retinopathy. Services available under the programme include free Cataract surgery for the poor, detection and correction of refractive errors in children and treatment of corneal blindness by corneal transplantation from donated eyes.

The programme implementation is decentralized and activities are coordinated by State / District Blindness Control Societies throughout the country. During the year 2006-07, more than 50.40 lakh operations were performed in the country of which 92% were implanted with Intra Ocular Lenses (IOL). 3.54 crore students were screened for refractive errors, of which 9.63 lakh were detected with refractive errors and 4.56 lakh poor children were given free glasses. Nearly 30,000 eye donations take place annually in the country. During the 11th Plan, emphasis is being laid on developing capacities for treatment of childhood blindness, glaucoma and diabetic retinopathy though training of eye surgeons and supply of ophthalmic equipments.

NATIONAL AIDS CONTROL ORGANISATION (NACO)

Situation Analysis

The HIV epidemic in the country has been categorized as a concentrated form of an epidemic as HIV prevalence among high risk population has been observed to be persistently high in comparison to the general population. According to the Sentinel Survey figures released in 2006, there are an estimated 5.206 million HIV infected person in the country in the age group 15-49 years giving an adult prevalence of HIV

infection as 0.9%.. Out of the total estimated HIV infections, 38.4% are women and 57% of these infections are in rural area. During 2006, a total of 95 ANC sites showed an HIV prevalence of more than 1% and 34 STD sites showed an HIV prevalence of more than 10% indicating the Heterogeneity of the epidemic. Therefore, under NACP III, districts have been categorized as per the level of infection and the risk. Out of 610 districts, 140 districts are in category A, 47 districts are in category B and the rest of the districts are in category C & D.

Objectives of National AIDS Control Program

The specific objective of the programme is to reduce new infections by :

- Sixty per cent (60%) in high prevalence states so as to obtain the reversal of the epidemic; and
- Forty per cent (40%) in the vulnerable states so as to stabilize the spread of the epidemic.

Strategy for NACP phase III

Since more than 99% of population is uninfected, India has an opportunity to prevent an explosive epidemic as witnessed in Sub- Saharan Africa or South East Asian countries by adequately investing in prevention and treatment. Accordingly, during NACP III, two thirds of the resources and efforts have been committed to prevention with the remaining dedicated to care, support and treatment. However, converting money into program activities and desired out comes requires an adequate and appropriate mix of human resources and institutional structures to supervise the quality of implementation, monitor the logistics and provide financial oversight. Accordingly, the objectives of NACP III are proposed to be achieved through four key strategies:

1. Prevention of new infections in high risk groups and general population through:
    a. Saturation of coverage of high risk groups with targeted interventions (TIs), and
    b. Scaled up interventions in the general population
2. Providing greater care, support and treatment to a larger number of people living with HIV / AIDS.
3. Strengthening the infrastructure, operating systems and human resources in prevention, care, support and treatment programmes at the district, state and national levels.
4. Strengthening a nation-wide Strategic Information Management System.

The National AIDS Control Programme has 5 components and the status of programme activities are as follows:

1. Priority targeted intervention for populations at high risk

This component of the project aims to reduce the spread of HIV in groups at high risk like Female Sex Workers (FSW), Injecting Drug Users (IDU) and Men having Sex with Men (MSM) populations, and providing per counseling, condom promotion, treatment of sexually transmitted infections etc. This activity is being delivered through non-government organizations and community based organizations. During the year 2005-06, 1088 TIs were operational, and have increased to 1220 by March 2007.

In NACP III, the High Risk Groups are proposed to be accessed with the help of NGO's and community based organizations through approximately 2100 intervention

projects. Experience has demonstrated that addressing issues of empowerment of high risk groups is a successful strategy for obtaining their adherence to safe sex behaviour. During NACP III high risk groups will be supported to organize themselves into Community Based Organizations (CBOs) (i.e. organizations managed by the target beneficiaries themselves) so as to ensure sustainability and reduce their continued dependence on NGOs for accessing critical services. The target is to bring 50% of interventions (1050) under CBO management.

An amount of Rs. 2288 Crores will be spent on this activity during NACP III.

2. Preventive interventions for the general population

The main activities include: (a) IEC and awareness campaigns; (b) provision of voluntary testing and counseling services; (c) Safety of Blood and Blood products for transfusion; and (d) Prevention of occupational exposure.

Under IEC activities, multimedia campaigns are being taken up. Special communication packages are developed for groups like Sex workers, IDUs, Truckers and Street children etc. Focused radio programmes are broadcast on a regular basis, to provide information about prevention and control of HIV / AIDS. Field publicity units and song and drama division had undertaken extensive campaigns in rural areas. Over 4000 universities had covered over 3.5 million students under "University Talks AIDS" programmes. AIDS hotlines with 1097 toll free numbers have been established in 65 major cities in the country.

Integrated counseling and testing services (ICTC) including prevention of parent to child transmission centers (PPTCT)

There are an estimated 22 million at risk pepole in the country (6% of sexually active population). In 2006, only 3 million people could be tested and counseled at 3409 ICTCs. Thus only 13% of the at risk population could access counseling and testing services. Beside this, 13.5 million deliveries in the country are institutional. Out of this, only 2.1 million mothers could be counseled and tested and 16876 were detected with HIV positive in the PPTCT centers in 2006. Thus only 15% of the pregnant women could access PPTCT services. At present, there are 4132 Integrated Counseling and Testing Centers providing prevention and testing services to high risk population as well as pregnant women.

Under NACP-III, existing VCT and PPTCT centers have been remodeled as a hub to integrate all HIV related services and are called integrated counseling and testing centers. During NACP-III, all the Community Health Centers in the country will have ICTC with a total target of 4955 in the Public Health facilities. Besides this, ICTC services including PPTCT services will also be extended to 24 hour PHCs and private sector hospitals by training the available manpower and training. During 2007-08, ICTC up to the CHC level will be established in all category A & B districts on a priority basis. In hard to access areas and tribal areas, mobile ICTCs will be made available to provide counseling and testing services. The quality of tests will be assured by internal and external quality assurance mechanisms. All category A and B districts will have a co-coordinator who will oversee the functioning of ICTCs and PPTCT centers in a district. This co-coordinator will be appointed on a contractual basis and will not only supervise the functioning of ICTCs and PPTCTs in a district but will also work out strategies to enhance the client load in all ICTCs so as to achieve the target of 8-10 tests per day per center. In order to prevent the vertical transmission mother to child, an institutional mechanism will be established to know

the CD4 count of all pregnant HIV positive women by sending the blood samples to the nearest ART centre. The total budget allocated for this activity is Rs. 836 crores.

STI Services

A total of 30 million episodes of STI are occurring every year whereas 1.7 million have been reached through 866 STI clinics established in district hospitals and medical colleges by the end of financial year 2006-07. Besides this, the STI services are also being provided at Sub-districts level under the RCH programme. The utilization of STI services in these clinics has been found sub-optimal indicating that most of the vulnerable population may be accessing STI services from private service providers.

During NACP-III, STI services are being expanded though effective integration with the RCH-II programme, and through involvement of private sector. During the financial year 2007-'08 existing STI clinics will be strengthen and quality STI services will be ensured at all sub-district health facilities by convergence with NRHM. A scheme for involvement of 5000 preferred private service providers will also be implemented particularly in category A and B districts. The ICMR STD network will also be utilized to monitor drug resistance and deciding on Syndromic Protocol. An amount of Rs. 150 crores will be spent on this activity during NACP-III.

Blood Safety

The Blood Safety component of the Programme ensures supply of adequate and safe blood in the country. It is mandatory to test all donated blood for hepatitis B and C, HIV, Syphilis and Malaria. NACO modernized and upgraded existing blood banks up to district level. Presently, there are 2211 operational licensed blood banks in the country of which 1230 blood banks including 82 Blood Component Separation Units are supported by NACO by providing one time equipment and an annual recurrent grant. A total of 10 model blood banks are operational in the country. The Voluntary Blood Donation Camps were organized every year to augment voluntary blood donation programme in the country. During 2006-07, the proportion of voluntary blood donation has increased from 52% in 2005 to 56.4%.

Under NACP-III, it is proposed to establish a plasma fractionation plant, 39 district level blood banks where at present there are no blood transfusion facilities; blood storage centres in 3222 CHCs (equipment grant by RCH-II & annual recurrent grant by NACO); provide Blood Bank vans in 500 districts for networking with blood storage centres to be operated by the Indian Red Cross Society or other established not for profit and trust organizations; 32 blood mobiles in various states; 22 additional model blood banks etc.

In order to improve access to safe blood, the following activities will be undertaken during 2007 - 08:

- The voluntary blood donation will be augmented to more than 65% of the total blood collection in the next financial year.
- 3070 Blood Storage Centres will be established. The equipment grant for these centres will be provided through NRHM, while NACO will provide training and annual recurring grant as well as the transport facilities for transportation of blood to these Storage Centres.
- Initiate the process of establishment of Centre of Excellence in four Metropolitan Cities.
- Initiate the process of establishment of One Plasma Fractionation Centre

- Initiate the process of establishment of One Model Blood Bank (in each of the States).

An amount of Rs. 955 Crores will be spent on this activity during NACP III.

3. Low Cost care for people living with HIV / AIDS

Under this, component activities would provide financial assistance for home based and community based care, including increasing the availability of cost effective interventions for common opportunistic infections. Necessary funds have been provided to all medical colleges and large hospitals in the country to ensure availability of drugs for management of opportunistic infections in HIV / AIDS patients.

122 Community care centers have been established in high prevalent States to provide palliative care to terminally ill AIDS patients, in these States.

At present there are 126 ART centres in 29 states of country. In addition, 5 centres are being supported by state Governments (Kerala, Jharkhand, J&K). At present, about 73,000 patients are receiving free ART in the country. In addition nearly 2,600 patients are receiving ART in hospitals run by other departments such as Defence, Railways and the NGO sector and another 20-25,000 in the private sector.

NACO has already procured and supplied drugs for treatment of 85,320 adult and 10,000 children for the year 2006-07.

The National Pediatric ART Initiative was launched on 30th November 2006 to enhance coverage of Children Living with HIV / AIDS and providing them specific pediatric formulations. 4127 children are receiving treatment in paediatric formulations. Paediatric drugs have been provided to 86 ART centres and arrangements are being made to supply the rest of the centres with these drugs, as it is anticipated that children will enroll for treatment if drugs are available.

Under NACP-III it is proposed to provide universal access to a continuum of care. Accordingly, prevention will go hand in hand with access to prophylaxis, management of opportunistic infections and ART. Given the low levels of coverage, focus will also be on assuring universal access to first line ARV drugs in the first instance. The Community Care Centres, which under Phase II were established as hospices for providing treatment to the terminally ill, will now be reconfigured to function as a bridge between patients and the Anti-retroviral Treatment (ART) centres for providing psycho-social support, adherence counselling through strong outreach services, referrals and palliative care. Home based care will be an integral part of this strategy.

Care, support and treatment services will include management of opportunistic infections including TB, anti-retroviral treatment (ART), safety measures, positive prevention and impact mitigation. By 2011, the programme will be able to treat 3.2 lakh OI episodes in a year, provide TB referrals to 28 lakh PLHA and ART treatment to 3.4 lakh PLHAs in the public sector.

In 2007-08, the focus will be on providing greater care and support and treatment services to larger number of People Living with HIV / AIDS through:

- Expansion of Anti-retroviral Treatment, Care and Support to cover the entire country under GFATM Round VI (Project Approved)
- Expansion of ART services through hospitals in other sectors (Railways, ESI, Army etc.), PSUs, Corporate Hospitals and NGOs.
- It is also planned to provide free ART to 100,000 patients by end 2007 and 300,000 patients by 2012

An amount of Rs. 1953 Crores will be spent on this activity during NACP III.

4. Institutional strengthening

Institutional Strengthening:

- It is proposed to strengthen Human Resource Capacity at NACO by enhancing strategic planning skills, disseminating best practices for TIs, establishing and managing a network of technical expertise through Technical Resource Groups (TRGs) in STI / HIV / AIDS, conducting OR and to oversee R&D activities nationwide. These are some of the thrust areas for strengthening institutional capacity. NACO has also developed Project's financial management system for effective financial management of the programme.
- Training: Regional and state level training were organised as part of capacity building for health care providers under NACP-II. NACO prepared a team of trainers (TOT) who worked closely with SACS where more than 95% training is conducted in a decentralized manner. An estimated 88,954 doctors and health workers were trained in HIV / AIDS during the current Financial Year. As on March, 2007, a total of 794,000 personnel were trained, including specialist doctors of medical colleges, general DMOs, nurses, IEC officers, counselors, NGOs, lab technicians, blood bank officials and district nodal officers. During this period, review and printing of training curricula / module / materials was undertaken, guidelines for District Action Plans were laid down, training of national and sate level trainers was completed and refresher / induction training of TOTs held.

An amount of Rs. 497 Crores will be spent on this activity during NACP III.

5. Build Capacity for M&E Programme Activities: An independent National M&E agency was selected and each SACS was asked to have its own M&E officer. The Performance and Expenditure Annual Review (PEAR) involved a review by NACO with SACS on expenditure, financial flows, annual action plans, PMRs and project input, outcome and process indicators. PEAR will be on the basis of allocation of funds by NACO to SACS.

As part of M&E under NACP-II, BSS was carried out amongst general population and HRGs across 35 States and UTs in the country in 2001 providing baseline information on behaviour risk patterns. End line BSS has been completed and results are presently being compiled.

An amount of Rs. 360 Crores will be spent on this activity during NACP III.

Development of indigenous vaccine and Operational Research are the main activities under research priorities of the programme.

6. Inter-sectoral collaboration

This component aims at promoting collaboration amongst the public, private and voluntary sectors. The activities are collaborated with other programmes within the Ministry of Health & Family Welfare and other central ministries and departments. collaboration is focussed on; (I) Learning from the innovative HIV / AIDS programmes that exist in other sectors; and (II) sharing in the working of generating awareness, advocacy at delivering interventions.

A high level National Council on AIDS has been constituted under the chairmanship of Hon'ble Prime Minister with representation of 33 ministries and departments to ensure mainstreaming of HIV / AIDS prevention activities in ongoing

programmes of concerned ministries and departments. The 1st meeting was held on 16th February 2006.

7. Financial allocation

The details regarding allocation of funds and utilization during last three years are as follows:

(Rs. in crore)

S.No.	Year	Funds allocated	Funds utilized
1.	2003-04	225.00	231.75
2.	2004-05	426.00	422.00
3.	2005-06	533.50	532.70
4.	2006-07	705.00	512.00

During NACP III, in order to implement the wide range of interventions indicated above, a financial resource plan has been worked out. Overall, the plan needs an investment of Rs. 11,585 crore. Of this an amount of Rs. 8023 crore is estimated to be provided in the budget, the rest being extra budgetary funding largely from private donations, direct funding from bilaterals and UN organisations. A summary of the component-wise Budget is given below:

TABLE - 1: NACP III: SUMMARY OF COMPONENT-WISE BUDGET

(Rs. in crore)

Programme Component	Total Estimated Amount	Percentage Total	Amount Required to be provided in the Budget	Percentage to spending under budget
Prevention	7,786	67.2	5886	73.36
Care, Support and Treatment	1,953	16.9	1584	19.74
Programme Management	910	7.9	450	5.6
Monitoring, Surveillance and Research	360	3.0	103	1.3
Others Including Contingency	576	5.0	*	
Total	**11,585**	**100**	**8023**	**100**

Table 2 indicates the sources providing funds through the budget as follows:

TABLE - 2: NACP III: SOURCE OF FUNDS FOR BUDGET SUPPORT

Sl. No.	Source	Amount (Rs./crore)	Amount in foreign currency US $	% of Total Amount
I	**Direct Budgetary Support:** Govt. of India including NRHM	2861		35.7
II	**EAC(External Aid Component)**			

(i)	World Bank	1328	US$295 million	16.6
(ii)	DFID	808	95 million Pounds sterling	10.1
(iii)	GFATM (Round II, III & IV)	824	$183 million	10.3
(iv)	GFATM (Round VI under approval)	963	$214 million	12
(v)	GFATM Future Rounds	1014	$ 225 million	12.6
(vi)	USAID	225	$50 million	2.7
	Total EAC	5162		64.3
	Grand Total	8023		100

(1 USD= INR 45)

(1 Pound Sterling = INR 85)

Following is a statement indicating Physical Targets / Achievements for Financial Year 2005 - 06 and 2006 - 07 along with Projected Targets for the year 2007-08.

PHYSICAL TARGETS / ACHIEVEMENTS FOR 2005-06, 2006-07 & PROJECTED TARGETS FOR 2007-08

		Physical Targets & Achievements					
Sl.No.	Description		2005-06		2006-07		2007-08
		Programme Targets (units)	Year Targets	Achiev.	Year Targets	Achiev.*	Year Targets
	Prevention Package in High Risk Population						
1	Number of TI for CSW, MSM, IDUs Prevention in General Population	2100	1100	1088	1477	1259	1300
2	Number of schools with Adolescent Education Programme	144409	72205	90,000	1,11,000	1,11,000	14,000
	Improving STIManagement						
3	No. of STI clinics	Sub-District level facilities and 25,000 private practioners	845	845	975	974	
	Voluntary Counselling and Testing						
4	No. of ICTC clinics	4975	1470	1476	3394	3394	
	Blood Safety Measures						
5	No. of Model Blood banlks		9	9	10	10	-
6	Number of Blood Component Separation Units established (cumulative)	162 units	82	82	122	82	122
7	Number of plasma Fractionation Units established (cumulative)	2 units	0	0	1	0	1
	PPTCT Interventions						

8	Number of PPTCT centres established	4955	1500	1508	2425	2423	4333
	Care, Support and Treatment						
9	Number of ART centres established	250	54	56	100	101	150
10	No. of PLHAs on ART	300,000	25,000		50,000	56916	125,000
11	No. of children on ART	40,000	0	0	0	3459	10,000
12	Number of Community Care Centres established	350	50	50	121	122	147
13	Number of Drop-in Centres established		70	70	80	84	0
14	Number of Sero-Surveillance sites established	1200	600	750	1160	1162	1200
15	Number of district units established	611	0		0		163

OUTCOME BUDGET DELIVERABLES QUARTER-WISE FOR THE YEAR 2007-08 NATIONAL AIDS CONTROL ORGANISATION

Sl. No.	Deliverable	Annual Target	Quarter-wise Target (Physical)				Quarter-wise Target (Financial Rs. in Lakh)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Integrated Counseling & Testing Centers (ICTCs)	1518	118	200	200	1000	3859	4436	5348	5667
2	Training of Staff	87000	13050	26100	25230	22620	1531.8	3063.6	2961.48	2655.12
3	Modernisation of District level Blood Bank	39	0	0	19	20	448.13	448.13	467.4	508
4	Blood Component Separation Units	40	0	0	0	40	302.99	302.99	302.99	594.19
5	Plasma Fractionation Units	1	0	0	0	1				458.0
6	No. of persons accessing STI Services 10 million	10	2	2.3	2.8	2.9	2500	2875	3500	3625
7	New Sentinel Sites	198	0	0	198	0			788	
8	Targeted Interventions	600	38	162	200	200	456.0	1944.0	5200.0	5200.0
9	Community Care Centres	69	0	20	20	29	0	320.0	320.0	464.0
10	ART Treatment Centres	25	0	25	0	0	0	325	0	0
11	Schools to be covered under School AIDS Education	14441	0	5000	5000	4441	200	800	800	160
12	Number of district units established	154	0	60	100	154	0	93.6	108.8	128.24

National Iodine Deficiency Disorders Control Programme

Iodine is an essential micronutrient with an average daily requirement of 100-150 micrograms for normal human growth and development. There is an increasing evidence of distribution of environmental Iodine deficiency in various parts of the country. On the basis of surveys conducted by the Directorate General of Health Services, Indian Council of Medical Research Health Institutions and the State Health Directorates, it has been found that out of 324 districts surveyed, in all the 28 States and 7 Uts, 263 districts are endemic ie where the prevalence of Iodine Deficiency Disorders (IDDs) is more than 10%. It is also estimated that more than 71 million persons suffer from Iodine Deficiency Disorders.

The Government is implementing the National Iodine Deficiency Disorders Control Programme (NIDDCP) formerly known as National Goitre Control Programme (NGCP) since 1962 with a focus on the provision of Iodated salt, IDD survey / resurvey, laboratory monitoring of Iodated salt and Urinary Iodine Excretion, health education and publicity. The Annual production of iodated salt is about 49.00 lakh MT (2005-06). The Government of India has banned the sale of non-iodated salt in the entire country for direct human consumption under prevention of Food Adulteration Act, 1954. w.e.f. 17th May 2006.

National Mental Health Programme

The National Mental Health Programme was started in 1982 for providing community based mental health care using the existing public health infrastructure. The WHO report on Global Burden Diseases has projected mental illness to be the fourth major cause of morbidity. In the meta analysis of epidemiological studies in India the prevalence rate of mental and behavioral disorder for urban sector is 80.6 percent and rural sector 48.9 percent.

The District Mental Health Programme is a centrally sponsored scheme launched in 1996 and involves extending psychiatric services at the community level. The District Mental Health Programme is currently under implementation in 102 districts throughout the country. The National Mental Health Programme also includes strengthening of medical college department of psychiatry (under which 70 medical colleges have been covered), modernisation of mental hospitals (under which 23 mental hospitals have been funded), focusing on IEC and public education, research and training. A sum of Rs. 70 crore has been earmarked for implementation of the National Mental Health Programme during the year 2007-08.

Yaws Eradication Programme (YEP)

Yaws Eradication Programme (YEP) was launched as a central sector health scheme in 1996-97 in Koraput district, Orissa, which was subsequently extended to cover all 49 yaws endemic districts in ten states during ninth plan period. The programme basically aims to reach the unreached tribal areas of the country.

The National Institute of Communicable Diseases has been identified as the nodal agency for the planning, monitoring and evaluating the programme. The strategy includes trained manpower development, active detection and treatment of cases and contacts and IEC activities harnessing multisectoral approach. YEP is implemented by endemic State Health Directorates through existing health care system. The successful implementation of the programme resulted in reduction of the number of reported cases from 3,571 to zero during the period from 1996 to 2004. During 2005 and 2007, till May, no new case has been reported. Task Force on YEP under the chairmanship of Director General of Health Services, Government of India in a meeting held on 31st May 2006 recommended that Yaws may be declared as hairing been Eliminated and in a function organized at Vigyan Bhawan, New Delhi on 19-09-2006 Hon'ble HFM declared elimination of Yaws. Activities are being undertaken to achieve eradication.

During the tenth plan period, a sum of Rs. 4.5 crore has been allocated under YEP. Funds in the form of "Grant-in-aid" are being provided to the states for operational cost of undertaking active search, procurement of drugs, development of IEC materials, reorientation training for medical officers and health workers. An amount of Rs. 100 lacs is allocated for the financial year 2007-08.

NATIONAL CANCER CONTROL PROGRAMME

Cancer is an important public health problem with 7 to 9 lakh cases occurring every year. At any point of time, it is estimated that there are nearly 25 lakh cases in the country. Four lakh deaths are estimated to occur every year due to cancer. Forty per cent of the cancers in the country are due to tobacco. Hence Tobacco-related cancers are very common among males, namely, cancer of the lungs and oral cavity. Among women, cancer of uterine cervix and breast are common.

The National Cancer Control Programme was launched in 1975-76 with the objectives of primary prevention, early detection, treatment and rehabilitation. In order to cater to the changing needs of the disease, the programme has undergone three revisions with the third revision completed in December 2004. Under the revised programme, the primary focus is on correcting the geographic imbalance in the availability of cancer care facilities across the country. The scope of the programme and the quantum of assistance under the various schemes have been increased. There are 5 schemes under the Revised Programme :-

1. Recognition of new Regional Cancer Centres (RCCs) by providing a one-time grant of Rs. 5.00 crore.
2. Strengthening of existing RCCs by providing a one-time grant of Rs. 3.00 crore.
3. Development of Oncology Wings by providing enhanced grant of Rs. 3.00 crore to the Govt. institutions (Medical Colleges as well as government hospitals).
4. District Cancer Control Programme by providing the grant-in-aid of Rs. 90.00 lakh spread over a period of 5 years.
5. Decentralized NGO scheme by providing a grant of Rs. 8000 per camp to the NGO for IEC activities.
6. A new component namely "Upgradation of the existing RCC into Centre of Excellence" was approved for the year 2006-07 and a total grant-in-aid of Rs. 16.00 crore was distributed among the three RCCs namely Allahabad, Ahemdabad, Bangalore and Trivandrum.

- As of now, there are 25 Regional Cancer Centres providing comprehensive cancer care services. There are 210 institutions possessing radiotherapy installations.
- A National Strategic Task Force has been constituted to formulate a strategy for the National Cancer Control Programme for the Eleventh Five year Plan.
- Training: In order to increase the capacity of the health staff at all levels of health care, training manuals have been developed in cancer control, tobacco cessation, cytology and palliative care.
- Onconet-India: C-DAC Trivandrum has been entrusted with the responsibility of preparing the DPR for Operationalisation of Onconet India. Under the project all 25 RCCs will be linked with each other and also each RCC would in turn be linked to 5 peripheral centres.
- Membership of IARC: India has become a member of the international Agency for Research in Cancer that shall provide a fillip to cancer research in the country.
- National Caner Awareness Day: A function was organized for celebrating National Caner Awareness Day, 2007 on 7th November, 2007 in collaboration with NCT of Delhi in National Stadium which was presided over by the Hon'ble MoS (H&FW), Govt. of India.

EMERGENCY MEDICAL RELIEF

India with a wide range of topographic and climatic conditions has witnessed various types of natural disasters. During 2006, heavy rains and severe floods occurred in the States of Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Jammu & Kashmir, Madhya Pradesh, Chhatisgarh and Kerala. The Emergency Medical Relief Division (EMR) of the Directorate General of Health Services, Ministry of Health & Family Welfare, Govt. of India coordinates health relief activities in terms of manpower and material logistics support to the states.

EMR coordinated deputation of Central Health Teams to flood affected States of Rajasthan, Andhra Pradesh, Gujarat and Maharashtra. Ministry of Health and Family Welfare was represented in the central damage assessment teams of the Ministry of Home Affairs which visited flood affected states of Rajasthan, Maharashtra, Chhatisgarh.

Rajasthan experienced an unprecedented rainfall during August, 2006 affecting 12 districts, 2469 villages affecting 70.27 lakh population. EMR division coordinated the health sector relief activities mobilizing and deploying 70 doctors to assist the State health authorities. This division also facilitated supply of drugs and disposables. The situation was monitored on day to day basis for medical care of the affected population and for instituting public health measures to prevent water-borne and vector borne diseases.

The EMR division coordinated outbreak investigations for chikungunya reported in the States of Gujarat, Maharashtra, Madhya Pradesh, Andhra Pradesh, Tamil Nadu, Pondicherry and Kerala. Teams were also deputed to investigate suspected encephalitis outbreak in Gorakhpur, Saharanpur, Kushi Nagar of Uttar Pradesh and Haldwani district of Uttaranchal. The concerned state governments were advised on preventive and curative measures. The dengue situation in Delhi was continuously monitored.

Outbreaks of Avian Flu among poultry were notified in Nundurbar and Jalgaon districts of Maharasthra, Surat District of Gujarat and Burhanpur district of Madhya Pradesh in February-April, 2006. The contingency plan prepared by the Ministry of Health and Family Welfare were put into operation immediately. The action taken included surveillance of 10 lakh population by the central and state teams, identifying and strengthening hospitals near the operational area, isolation and observation of suspected persons, ensuring adequate quantity of Oseltamivir and personal protective equipments, monitoring health status of personnel from health and animal husbandry departments, providing laboratory support, creating awareness among the public through mass media and health teams in the field. In MOHFW, The EMR division coordinated and monitored all activities including those at field level during the outbreak. Due to the concerted efforts of all concerned no human case of avian influenza has been reported.

Prevention of Food Adulteration Programme

Prevention of Food Adulteration Programme: The Ministry of Health and Family Welfare is responsible for ensuring safe food to the consumers. Keeping this in view, a legislation called "Prevention of Food Adulteration Act, 1954" has been enacted. The objective envisaged in this legislation is to ensure pure and wholesome food to the consumers and also to prevent fraud or deception. The Act has been amended thrice in 1964, 1976 and in 1986 with the objective of plugging the loopholes and

making the punishments more stringent and empowering Consumers and Voluntary Organisations to play a more effective role in its implementation.

Constitutional Status and Enforcement of the PFA Act: The subject of the Prevention of Food Adulteration is in the concurrent list of the constitution. However, in general, the enforcement of the Act is done by the State / U.T Governments. The Central Government primarily plays an advisory role in its implementation besides carrying out various statutory functions / duties assigned to it under the various provisions of the Act.

The laws regulating the quality of food have been in force in the country since 1899. Until 1954, several States formulated their own food laws. But there was a considerable variance in the rules and specifications of the food, which interfered with inter-provincial trade. The Central Advisory Board appointed by the Government of India in 1937 and the Food Adulteration Committee appointed in 1943, reviewed the subject of Food Adulteration and recommended for Central legislation. The Constitution of India provided the powers to Central Government for making such legislation as the subjects of Food and Drugs Adulteration are included in the concurrent list. The Government of India, therefore, enacted a Central Legislation called the prevention of Food adulteration Act (PFA) in the year 1954 which came into effect from 15 June, 1955. The Act repealed all laws, existing at that time in States concerning food adulteration.

Food Quality Control Services: In India, a three-tier system is in vogue for ensuring food quality and food safety. They are:(a) Government of India; (b) State / UT Governments;(c) Local Bodies.

The role of Government of India / Central PFA Cell: The Prevention of Food Adulteration Act is a Central legislation. Rules and Standards framed under the Act are uniformly applicable throughout the country. Besides, framing of rules and standards, the following activities are undertaken by the Ministry of Health and F.W:

(1) Keeping close liaison with State / local bodies for uniform implementation of food laws . (2) Monitoring of activities of the States by collecting periodical reports on working of food laws, getting the reports of food poisoning cases and visiting the States from time to time. (3) Arranging periodical training programme for Senior Officer / Inspector / Analysts. (4) Creating consumer awareness about the programme by holding exhibitions / seminars / training programmes and publishing pamphlet'. (5) Approving labels of Infant Milk Substitute and Infant food, so as to safeguard the health of infants. (6) Coordinating with international bodies like ISO / FAO / WHO and Codex. (7) Carrying out survey-cum-monitoring activities on food contaminants like colours. (8) Giving administrative / financial / technical support to four Central Food Laboratories situated in Kolkata, Ghaziabad, Mysore and Pune and providing technical guidance to the food laboratories set up by the States / Local Bodies.(9) Holding activities connected with National Monitoring Agency vested with powers to decided policy issues on food irradiation.(10) Formulation of Manual of method of analysis of food.

Codex Contact Point in India: The Ministry of Health and Family Welfare is designated as the National Codex Contact Point in India to examine and formulate India's views on the agenda for the various meeting of Codex Alimentarius Commission, a joint venture of FAO / WHO dealing with International Food Standards and its subsidiary committees. The Ministry of Health and Family Welfare constituted

a National Codex Committee (NCC) and an Assistant Director General (PFA) has been working as Liaison Officer for NCC. The NCC has further constituted 24 Shadow Committees corresponding to various Codex commodities committees for preparation and finalization of India's stands.

India has been regularly atending the various sessions of the Codex Alimentarius Commission, and various Codex Commodity Committees to put forward India's views and defend these views in meetings.

Harmonisation of PFA with Codex : After signing the Sanitary and Phytosanitary (SPS) and Technical Barrier to Trade (TBT) agreements by India and removal of quantitative restrictions on import of food products into India, the exercise of harmonization of standards for food products, use of food additives, microbiological requirements, harmonization of regulations, in line with international standards prescribed by Codex Alimentarius Commission and International Standards Organisation (ISO) had been initiated long back.

Role of State / UT Governments: Enforcement of the food laws primarily rests with the State / UTs. There are 28 States and 7 Union Territories in the country. The implementation of the Act in most of the States is under the administrative control of the Directorate of Health Services, whereas, in a few States, the implementation is being combined with Drugs Administration under the Joint Food and Drug Administration. The implementation has been left to the administrative setup of the States, but it has been stressed on the States that whatever the structure be, there should be a whole-time Senior Officer duly qualified and experienced in Food Science, Food Technology, Food Analysis with other supporting officers and inspectors. State Governments are also empowered to make rules laying down details of licensing conditions of food, the establishments of food industries and prescribing licence fees / analysis fees.

The provisions under PFA Rules have been amended nearly 360 times and standards of around 250 articles of food which are of mass consumption have been prescribed. While making amendments, standards formulated by Codex / technological development in the food industry sector / dietary habits / nutritional status of our population, social / cultural practices are taken into consideration.

By and large, in most of the States, implementation in corporation / municipal area rests with the Local Bodies who employ their own food inspectors. Licensing of food industries / establishments is also left them.

There are 72 food laboratories in the country at District / Regional or State level in addition to four Central Food Laboratories set-up by the Central Government. Almost every State has got one or more laboratories depending upon its need. About 12 of these laboratories are under the administrative control of the local bodies whereas the remaining ones are under the administrative control of the State Government.

Following constraints have been noticed in the programme: -

(1) Shortage of Food Inspectors with the States / Local Bodies,

(2) Deficiency in the testing laboratories on the following counts:

  (a) Inadequate trained manpower,
  (b) Inadequate testing facilities,
  (c) Non-availability of sophisticated equipment,
  (d) Inadequate budgetary provision,
  (e) Non-availability of reference standard material,

(3) Non-availability of programme officer for PFA with the State / Local Bodies at State and District levels,

(4) Non-availability of separate legal cell for trial of a PFA cases with the State / Local Bodies,

(5) Non-availability of regular refresher training programme for all the functionaries.

Efforts of Central Government for Solving the Constraints:

(1) Refresher training programme are being arranged for all the functionaries namely:- (a) Food Inspectors, (b) Local (Health) Authorities, (c) Food (Health) Authorities, (d) Public Analyst and Chemist. Training for Analysts and Chemist are being organized in their own laboratories by trainer deputing by the Central Government. These trainers stay in one lab for six working days and first of all they setup the laboratory as per Good Laboratory Practices and, thereafter, the specific training is organized.

(2) Sophisticated equipments are being supplied to State Food Testing Laboratories so that at least one laboratory in each State is appropriately strengthened. Efforts are being made to ensure that warranty of the equipment so supplied are for minimum 3 years along with consumables and proper trainings is provided to the analysts / chemists by the supplier for handling and running the equipment.

(3) Efforts are also being made to ensure that each State is linked electronically with its District Headquarters. The expenditure for this is proposed to be provided from the World Bank Assisted Capacity Building Project for food and drugs being implemented by the Central Government. This will facilitate smooth sharing of information and networking.

(4) Efforts are being made to provide at least one analyst from the Central Budget through the World Bank Assisted Project in each Food Testing Lab for a period of 5 years.

(5) Standard reference material for pesticides, listed under Rule 65 of PFA Rules, all the metals listed under Rule 57 of the PFA Rules, and aflatoxin are being supplied to one lab in each State.

(6) Books on methods of analysis like AOAC, Pearson, Food Chemical Codex, have already been supplied to a majority of the laboratories and this year new editions are also being supplied to them.

(7) Training programme for consumers, traders, vendors and street food hawkers have been organized and will be organized this year also as a consumer education programme on food safety.

(8) Sensitisation training programmes have been organized for Port (Health) Officers / Customs Officers / Customs House Clearing Agents and importers on various provisions of PFA Act / Rules and other provisions namely packaged Commodity Order and Customs Act, so that these officers may appropriately handle the imported food product.

The Food Safety and Standards Act, 2006: With the coming into effect of the Food Safety and Standards Act, 2006 (FSSA) enacted by Parliament in August 2006, the Prevention of Food Adulteration Act, 1954 will stand repealed, from the date on

which Food Safety and Standards Act comes into force on such date as the Central Government may, by notification in the Gazette appoint.

Notwithstanding the repeal of the enactment and Orders specified in the Second Schedule, the standards, safety requirements and other provisions of the Act and the rules and regulations made there under and Orders listed in that Schedule shall continue to be in force and operate till new standards are specified under this Act or rules and regulations made thereunder.

Provided that anything done or any action taken under the enactment and Orders under repeal shall be deemed to have been done or taken under the corresponding provisions of this Act and shall continue in force accordingly unless and until superseded by anything done or by any action taken under this Act.

World Bank Assisted-Capacity Building Project on Food Safety

As trade in food commodities expands globally, food safety can no longer be considered a mere domestic issue. The agreements under the WTO require the development of modern food control and safety programs by national Governments. The issue does not relate only to end product parameters but also to process control.

In order to strengthen the food safety infrastructure in the country, a 5 year world Bank Aided Capacity Building Project for Food Safety and Quality Control of Drugs has been launched by the Central Government.

The Project Objectives / Components are as below: (i) To enhance the capacities of laboratories at the State and Central levels through infrastructure strengthening and training of personnel to upgrade their existing skills. It is separately proposed that only those labs be allowed to do statutory testing which are accredited to NABL.(ii) To introduce GMP and HACCP in the medium and small-scale food processing operations and upgrade facilities in the laboratories including testing for microbiological contamination.(iii) to create greater awareness of food safety and hygiene in the small, cottage and unorganised sectors including the street food sector through training, (iv) to develop a system of continuous surveys of households to get client perceptions which will provide substantive inputs for policy development and program improvements.(v)Setting up of Management Information System and electronic linkages between Central and State Offices and Central and State Labs in the area of food to ensure better monitoring and data collection.

The five-year project is estimated to cost Rs. 354 Crore.. The Project has become effective from October 2003.

MEDICAL COUNCIL OF INDIA

The Medical Council of India (MCI) was established as a statutory body under the provisions of the Indian Medical Council Act 1933 which was later repealed by the Indian Medical Council Act 1956 with minor amendments in 1958. A major amendment the I.M.C.Act 1956 was made in 1993 making it mandatory for obtaining the approval of the Ministry of Health & Family Welfare for opening new medical colleges / increasing seats, starting new courses in order to regulate the standard of medical education in the country. The I.M.C. Act 1956 was further amended in 2001 to enable the Medical Council of India to conduct Screening Tests for Indian nationals holding foreign medical qualifications to test their skill before granting them registration to practice medicine in India. Through the same amendment Act, it has been made mandatory for Indian students desirous of taking admission in an under-graduate medical course in an Institute abroad to obtain an Eligibility Certificate

from the MCI stating that he / she conforms to the norms laid down by the MCI for this purpose. The main functions of the Council are maintenance of uniform standard of medical education both at the undergraduate and the postgraduate levels; maintenance of Indian Medical register; reciprocity with foreign countries in the matter of mutual recognition of medical qualifications; continuing medical education and granting of provisional / permanent registration of doctors with recognized medical qualifications, registration of additional qualifications and issue of Good Standing Certificate for doctors going abroad to commonwealth countries. At present there are 264 medical colleges in the country out of which 185 medical colleges have been recognized by MCI and 90 new medical colleges have been permitted by the Central Government to conduct MBBS courses. The admission capacity in these colleges is approximately 30,122 students per year.

CENTRAL HEALTH EDUCATION BUREAU

Central Health Education Bureau (C.H.E.B.) is an apex institution which had a humble beginning on 6th of Dec in 1956 under Directorate General of Health Services (DGHS), the Ministry of Health and Family Welfare, Government of India, for the health education and health promotion in the country with the following Objectives: (a) Interpret the plans, programmes and achievements of the Ministry of Health and Family Welfare. (b) Design, guide and conduct research in health behavior, health education process and aids. (c) Produce and distribute "Proto-type" Health Promotion and Education material in relation to various health problems and programmes in the country. (d) Train key health and community welfare functionaries in health education and research methods and evolve effective methodology and tools of training. (e) Help schools and teacher training institutes for health education of the school population. (f) Provide guidelines for the organizational set-up, functioning of health education units at the state, district and other levels. (g) Render technical help to official and non-official agencies engaged in health education and coordinate their programmes. (h) Collaborating with international agencies in promoting health education activities.

The Bureau, located at Kotla Road in New Delhi-110 002, is headed by a Director, an SAG officer who is assisted by a team of officers in different disciplines. CHEB is accessible through internet at our website- http: / / .cheb.nic.in and e-mail : dir.cheb @ nic. in

Responding to the current challenges and needs in the field of health education and promotion, CHEB has reorganized its divisions into four technical and one administrative Division. Each division is headed by a senior officer.

The key functions of CHEB presently include imparting long-term and short-term training programmes to the different levels of health and non-health professionals. The Bureau is conducting a two-year Post Graduate Diploma in Health Education (DHE) which is recognized by the Medical Council of India and is affiliated to Delhi University.

The short-term courses, usually of one week duration are meant for different levels of health functionaries such as medical officers, paramedical staff, key trainers from the education sector, students pursuing undergraduate and post graduate courses in medicine, nursing colleges and schools across the country. Certificate courses in health education and health promotion for paramedical and non-health professionals is proposed to be restarted soon. Short-term courses in Health Promotion and Education for the faculty of DIETS are also being conducted.

The curriculum for postgraduate diploma in health education has been updated. Curricula for short term training courses of one day, one week and three months has been drafted to be finalized in a national workshop to be held this year.

The Bureau produces prototype Health Education and health promotion materials on different health issues both in print and electronic media like posters, leaflets, pamphlets, Audio- visual spots (for telecasting on TV Channels, and narrowcast in events such as Health meals / exhibitions health awareness campaigns). The Bureau participates in various health meals / national level exhibitions and puts up exhibitions on various health issues for mass awareness. Press advertisements are given as apart of the observance of commemorative days and weeks.

RASHTRIYA AROGYA NIDHI

Rashtriya Arogya Nidhi (RAN) previously known as National Illness Assistance Fund (NIAF) was set up under the Ministry of Health and Family Welfare in 1997 with an initial contribution of Rs. five crore. Funds have also been set up in the following 21 States States / UTs (with Legislature)- Karnataka, Madhya Pradesh, Tripura, Andhra Pradesh, Tamilnadu, Himachal Pradesh, Jammu & Kashmir, Maharastra, West Bengal, Kerala, Mizoram, Rajasthan, Goa, Gujarat, Sikkim, Bihar, Chhatisgarh, Jharkhand, Uttarakhand, NCT of Delhi and Pondicherry. These States / union territories have been released grant- in- aid as admissible under the scheme. Other states have been requested to set up the fund. All five Union Territories (without Legislature) Lakshdweep,. Daman & Diu, Dadra & Nagar Haveli, Andaman & Nicobar Islands, Chandigarh have also set up this fund. Medical Superintendents of three Central Government Hospitals and three Institutes of national repute,viz., Dr.RamManohar Lohia Hospital, Safdarjang Hospital, Lady Hardinge Medical College and Smt. Sucheta Kripalani Hospital, All India Institute of Medical Sciences, all in New Delhi, Post Graduate Institute of Medical Education and Research, Chandigarh and Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry have been sanctioned funds from Rashtriya Arogya Nidhi to provide immediate financial assistance up to Rs. 50,000 per case to patients living below the poverty line. This scheme was subsequently extended to the National Institute of Mental Health and Neurosciences, Bangalore, Chittranjan National Cancer Institute., Kolkatta, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, Gandhi Memorial Hospital and King George Medical College, Lucknow and the Central Institute of Psychiatry Ranchi by giving them similar advance funds. These funds are replenished from time to time. Poor patients get financial assistance from these schemes.

EMERGENCY FACILITIES ON NATIONAL HIGHWAYS

Under the project for the up-gradation and strengthening of emergency facilities of State Hospital of towns / cities located on National Highways, the government provides financial assistance to the maximum of Rs. 1.50 crore or the actual requirement of the hospital, whichever is less, to augment and upgrade the Accident and Emergency Services in selected State Government Hospitals which fall in most accident prone areas of National Highways. The aim of the scheme is to augment the Accident and Emergency Services by release of grants-in-aid direct to the Government Hospitals / Institutions of State Government / UT Administration for: (i) Purchase of Well-equipped ambulances and basic essential equipment required for Accident and Trauma Services; (ii) Communication System;(iii) Infrastructure (Blood Bank, Examination Room,

Resuscitation, ICU & Burn Beds (7), X-Ray Room, Reception, Control, Minor OT; and (iv) Beds and Equipment.

NATIONAL ACADEMY OF MEDICAL SCIENCES (INDIA), NEW DELHI

The National Academy of Medical Sciences (NAMS), New Delhi was established in 1961 as a Non-Official body of Bio-Medical scientists with the object of promotion and encouragement of merit in medical sciences. The fellowship of the Academy became a coveted hallmark of distinction accorded in recognition for outstanding achievements in sciences, education, services, etc. The Academy awards Fellowships to the most distinguished men of science. The Academy has also been implementing the Continuing Medical Education (CME) Programme since 1982. As on 30th March 2006, the NAMS has on its rolls 7 Honorary Fellows, 738 Fellows (FAMS), 1468 Members (MAMS) and 2238 Members (MNAMS).

Pharmacy Council of India

The Pharmacy Council of India is a statutory body constituted under the Pharmacy Act, 1948. It is responsible for the regulation of pharmacy education and practice of profession in the country for registration as a pharmacist. At present, there are 497 approved institutions imparting Diploma in Pharmacy to 29,958 students per annum and 276 approved institutions imparting Degree in Pharmacy to 15,815 students per annum. At present about 5.76 lakh Pharmacists are registered with various State Pharmacy Councils.

INTEGRATED DISEASE SURVIELANCE PROJECT (IDSP)

Background : The integrated Disease Surveillance Project (IDSP) was launched by Hon'ble Union Minister of Health and Family Welfare in November 2004. It is a decentralized, State based Surveillance Program in the country. It is intended to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. It is also expected to provide essential data to monitor progress of the on-going disease control programme and help allocate health resources more efficiently. All the states shall be covered for implementation in Phases. In Phase-I I 9 states, in Phase - II 14 states and in Phase - III 12 states are included.

Target Diseases for Surveillance

Regular Surveillance : Malaria, Cholera, Typhoid, Tuberculosis, Polio, Road Traffic Accidents, Plague, Yellow fever, Meningoencephalitis / Respiratory Distress, Hemorrhagic fevers, Unusual Clinical syndromes causing death and hospitalization.

Sentinel Surveillance: HIV / HBV, HCV, Water Quality, Outdoor Air Quality.

Regular periodic surveys: NCD Risk Factors (Obesity, Blood Pressure, Tobacco use etc).

State specific diseases: The States can identify up to five state specific diseases that require surveillance based on disease burden and availability of public health action.

Project Management: For Project implementation, Surveillance Units have been set up at Central, State and District levels. Surveillance Committees at National, State and District levels are monitoring the Project. CSU is supported by Regional Coordinators and a Lab Coordinator.

IT networking : The Integrated Disease Surveillance Project (IDSP) is establishing linkages with all District HQ, State Head Quarters and all Government Medical Colleges on a Satellite Broadband Hybrid Network. 108 sites have already been made

active by ISRO and the requisite equipment has been installed at all these sites. The network, on completion will enable 800 sites on a broadband network, 400 sites (out of these 800) will have dual connectivity with satellite and broadband. A process has been initiated for the establishment of a Centralized Call Center at Delhi / NCR that would receive disease alerts from anywhere in the country on a toll free number and would diverge the information to the respective District Surveillance Units for verification and initiating appropriate actions if required.

Strengthening of Laboratories : An Agency was recruited to do a baseline survey of public health laboratories in 20 selected districts in 9 Phase-I States. Using the same model, the survey of 9 out of 14 phase II states have been completed. Based on this assessment, equipment and reagents will be procured to strengthen the laboratories.

NCD Risk factors surveillance : ICMR has been given the entire responsibility to undertake NCD risk factor surveillance. The survey in the fields is set to begin in July 2007 in the 8 states of Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Maharashtra, Madhya Pradesh, Uttrakhand and Mizoram. The risk factors to be studied are Height, Weight, Waist Circumference, Physical Inactivity, Diet, Socio Demographic Profile, Fasting Plasma Glucose, Cholesterol, and consumption of Alcohol and Smoking.

Urban Surveillance : Urban Surveillance plan for 3 metro cities of Mumbai, Kolkata and Chennai have been in the process signing of MoUs. For Delhi Urban Surveillance plan is merged with state IDSP.

Training : Training of State / District Surveillance Teams has been completed for 9 States of Phase-I and 13 States of phase II. A total of 1556 master trainers have been trained. One day for all the training programmes is kept exclusively for Avian Influenza. External evaluation of the training of State and District Surveillance Teams has been done for Phase- I States. IDSP also sponsored training of 6 officers from 3 states for 3-months FETP held in NICD during August-October 2006.

Data Management Status : IDSP presently receives weekly disease surveillance reports from about 70%(280 / 397) districts. In phaseI, 173 out of 210 districts (82%) and in phase II 107 out of 188 districts (57%) are sending weekly reports to CSU, IDSP. Data analysis and action are being taken by the respective districts.

Prevention and Control of Avian Influenza : A proposal has been prepared to support activities related to Avian Influenza under IDSP with total outlay of Rs. 20.85 crores for three years (2006-09) for the Human Component.

Budget: Total Budget for the project from 2004-09 is 408.36 crores. In the current year of 2007-08 the Budget Estimate is 80 crore.

DENTAL COUNCIL OF INDIA

Dental Council of India is a statutory body established under the Dentists Act, 1948 with the prime objective of regulating dental education, profession and its ethics in the country. It periodically carries out inspections of dental institutions to ascertain the adequacy of teaching facilities. 243 Dental College are functioning in the country with an annual intake capacity of about 18450 students in the BDS course during the academic session 2007-2008. The total number of registered dentists as on 31.5.2006 was 78,578.

NATIONAL RURAL HEALTH MISSION (NRHM)

Introduction

The National Rural Health Mission was launched by the Hon'ble Prime Minister on

12th April 2005, to provide accessible, affordable and accountable quality health services even to the poorest households in the remotest rural regions. The difficult areas with unsatisfactory health indicators were classified as special focus States to ensure greatest attention where needed. The thrust of the Mission was on establishing a fully functional, community owned, decentralized health delivery system with inter-sectoral convergence at all levels, to ensure simultaneous action on a wide range of determinants of health like water, sanitation, education, nutrition, social and gender equality. Institutional integration within the fragmented health sector was expected to provide a focus on outcomes, measured against Indian Public Health Standards for all health facilities. From narrowly defined schemes, the NRHM shifted focus to a functional health system at all levels, from the village to the district.

The State of Public Health in India

In order to assess the progress under NRHM, it is important to take note of the state of public health in India, as reflected in a large number of independent surveys and studies. Some of the key findings regarding important health indicators are as follows:

The challenges before NRHM and its key approaches

The data above clearly brings out the unsatisfactory state of public health in India. It is clearly a gigantic task to bring about major changes in outcome by simultaneous action on a wide range of determinants of health. The NRHM has based its interventions on the evidence from the studies and surveys listed above. It has identified communitization, flexible financing, innovations in human resource management, monitoring against IPH Standards, and building capacities at all levels as the principal approaches to ensure quality service delivery, efficient utilization of scarce resources, and most of all, to ensure service guarantees to local households. Health is a state subject and the NRHM is making an effort at building a partnership with the States to ensure meaningful reforms with more resources. Ultimately, the success of NRHM will depend on the ability of the Mission interventions to galvanize State Governments into action, pursuing innovations and flexibility in all spheres of public health action. Ensuring availability of fully trained and equipped resident health functionaries at all levels and financing based on a large scale demand side, under initiatives like the Janani Suraksha Yojana for institutional deliveries are a few priorities for action. Partnerships with non governmental providers to strengthen pubic health delivery are also an important need given the distribution of specialist doctors in India. While we have 30,000 MBBS graduates coming out of our Colleges every year, the entire rural health system for more than 750 million people never has more than 26000 doctors.

The Progress so far

The NRHM is not even 2 years old and already there are some very significant gains in the health sector, in partnership with States. The Table below tries to capture some of the gains made during this period in key areas and the evidence from the States in this regard. Illustrative evidence from the States is indicated to convey the impact of the programme so far.

AREAS OF IMPROVEMENT

EVIDENCE FROM THE STATES

1. Out patient Cases : Reports from States indicate significant improvement. In Bihar, the average number of patients visiting a Primary Health Centre every month

Indicator	Source and Year	The National Picture
1. Infant Mortality Rate	Sample Registration System , RGI's Office 2004	58 for the country with a low of 12 for Kerala and a high of 79 for Madhya Pradesh
2. Maternal Mortality Rate	Sample Registration System 2003	301 for the country with a low of 110 for Kerala and a high of 517 for UP and Uttaranchal in the 2001-03 period.
3. Non Hospitalised treatment from government sources	National Sample Survey 60th Round 2004	22% for the Country, from a low of 5% in Bihar to a high of 68% in Himachal Pradesh
4. In-patient treated in public Hospitals	National Sample Survey 60th Round 2004	41.7% for the country, from a low of 14.4% in Bihar to a high of 91.3% in Jammu and Kashmir
5. Average medical expenditure per Hospitalization	National Sample Survey 60th Round 2004 in private Hospitals in rural areas.	Rs. 3238 in Government Hospitals compared to Rs. 7408
6. State of Health Facilities	DLHS and Facility Survey coordinated by IIPS 2003 FRUs	If adequacy is defined as having at least 60 per cent of the required inputs, only 76% of FRUs, and 63 per cent of CHCs have adequate infrastructure, 61 per cent of the and 46 per cent of CHCs have adequate equipment 32 per cent of FRUs and 24 per cent CHCs have adequate supply and 37 per cent of FRUs and 14 per cent of CHCs have adequate staff. During the three months preceding the survey only 58 per cent of the PHCs conducted deliveries, 6 per cent conducted MTP, 22 per cent provided Neo natal care, 65 per cent did IUD insertions and 41% conducted sterilizations. If the per centage of PHCs having adequate staff is more than 90 per cent in Tamil Nadu, Maharashtra and Kerala, it is less than 20 per cent in Orissa, West Bengal and Bihar.
7. Anaemia among children and women	National Family Health Survey 2005-06	79.1% 6-35 month children are anaemic. 56.1% married women aged 15-49 are anaemic.
8. Immunization	National Family Health Survey 2005-06	Only 43.5 % children are fully immunized.
9. Institutional Births, Ante natal care visits, post natal care	National Family Health Survey 2005-06	40.7% institutional births, 50.7% three Ante natal care visits, 36.4% post natal care visits.
10. Child Morbidity	FOCUS Survey 2004 (Jean Dreze et al) in Tamil Nadu, HP, Maharashtra, Rajasthan, Chhatisgarh and Uttar Pradesh	32% children had fever, 21% had diarrhea, 17% had persistent cough, 11% suffered from extreme weakness, 5% had skin rashes, 2% had eye infections during the two weeks preceding the survey. 50% children had one of the above problems.

has gone up from 39 in January 2006 to 3015 in August 2006. In Punjab, with the Alternate Health Delivery involving service providers under PRIs at 1310 Subsidiary Health Centres, out patient cases have gone up by 290% between June to October 2006. 39.6% improvement in cataract operations performed, 11.8% increase in new TB cases detected, and 25.1% increase in students examined under the School Health Programme has been reported. In Gujarat, out patient cases have gone up from 33.6 lakhs per year to more than 24.92 lakhs so far.

2. Institutional Deliveries : Reports from States indicate significant increase in institutional deliveries because of demand side financing under Janani Suraksha Yojana. From 6 lakh JSY cases last year, the number has already reached more than 21 lakhs so far. In 1152 PHCs in 50 Blocks of Madhya Pradesh under the Dhanwantari Yojana, institutional deliveries recorded more than 100% increase (From 26% to 53%). In Orissa, figures from 3 CHCs in Malkangiri and Koraput districts of the KBK region, shows increase in institutional delivery from 88 to 149, 59 to 120 and 97 to 169 respectively over a corresponding time period. In Haryana, with the innovative delivery hut scheme, the institutional deliveries went up from 28% in 2004-05 to 43.60% in 2005-06.

3. Availability of medicines : States have put in place effective systems of procurements of drugs. NRHM has advocated decentralized procurement in line with the successful Tamil Nadu Medical Supplies Corporation. Funds for procurement under NRHM were released to States. Even a state like Bihar, where procurement was ineffective, has put in place a very efficient and effective drug procurement arrangement for drugs on the essential drug list. States of Uttar Pradesh and Jharkhand revised the per capita allocation for drugs in out patient facilities, leading to better availability of drugs at health facilities. A few North Eastern States like Assam are procuring drugs from the TNMSC.

4. Immunization : Serious efforts have been made to ensure improvement in immunization coverage by promoting alternate vaccine delivery wherever required, providing incentives for immunization sessions, conducting catch up rounds and ensuring proper maintenance of the cold chain. Recent Unicef evaluation shows improvements in States like Uttar Pradesh, Bihar and Jharkhand. With popularization of the Monthly Health Days at Aanganwadi Centres., routine immunization has got a further fillip.

5. Monthly Health Days : More than 45 lakh Monthly health Days have been organized at Aanganwadi Centres, facilitating ANCs/PNCs, immunization, availability of basic drugs, etc. Evidence of successful Monthly Health Days in the presence of ANMs / AWWs are being reported from all States, including States like Tripura, Orissa, Madhya Pradesh, Rajasthan, Chhatisgarh, etc. Orissa uses the Monthly Health Days for malaria chaemophylaxis as well in the malaria affected areas. With Village Health and Sanitation Committees being set up in every village, public health measures will be the focus of these Monthly Health Days.

6. Resident Community workers / functional Sub Centres : More than 4.5 lakh ASHAs, Community Workers, Mitanins, Link Workers have been selected and are at various stages of selection. They are playing a very key role in community mobilization, seeking immunization and other health services, JSY, public health measures, advocacy, nutrition and health education and improving health seeking behaviour of households. By engagement of contractual ANMs wherever required and by provision of Rs. 10,000 annual untied grant, nearly all 1,44,988 Sub Health Centres have been made functional. Sub Centres have judiciously used the united funds as per need, from buying B.P. Equipment, weighing machine, to repairing the

Examination Table, cleaning the Sub Centre, etc. Early evidence suggests that deliveries have started taking place in a few Sub Centres because of the untied grants. A second ANM is in place in 7877 Sub Centres.

7. 24X7 PHCs with 2 additional Nurses : 2297 PHCs have been made 24X7 with a provision of two additional Nurses. Of these 780 have been made 24X7 in Tamil Nadu this year.

8. Community pressure for services from CHCs / Sub District / District Hospitals: Demand side financing under JSY and ASHAs / Community Workers are putting pressure on services from CHCs / Sub District and District Hospitals in all the States. The community pressure is putting pressure on the Health Facility to improve its performance. Rupees twenty lakhs have been provided to all the 3910 CHCs as a first installment to move towards Indian Public Health Standards. 2101 CHCs have carried out Facility Surveys to plan for the gaps as per IPHS. Facility Surveys of CHCs are available on this Ministry's web site. Rs. 50,000 Annual Maintenance Grant and Rs. 25000 as untied grant for PHCs have been sanctioned for each of the 22669 PHCs, to be used under the supervision of the RKS. Works have been completed in some facilities and are under way in a large number of them. It has taken a little time as Facility Surveys had to be completed as a prerequisite.

9. Rogi Kalyan Samitis : More than 13000 Rogi Kalyan Samitis / Hospital Development Committees have been set up in the country. Nearly all District / Sub District Hospitals and CHCs have opened their own Bank Accounts. PHCs are also in the process of doing so. Rs. 5 lakhs has been provided for District Hospital RKSs and Rupees One lakh for Sub District / CHC / PHC Hospitals / Centres. They are expected to make the functioning of the Hospitals more accountable, transparent and need based.

10. Improved outreach through MMUs : States have already operationalised more than 129 Mobile Medical Units from their own sources / NRHM. NRHM has approved MMUs for 314 districts and most of these units are expected to be come operational in the current financial year. NGOs are involved in such arrangements in many States. Gujarat, Andhra Pradesh, West Bengal, Orissa have set up effective systems for mobile units to improve outreach of services in remote areas.

11. Partnerships with Non Governmental Providers : Useful partnerships with non governmental providers have been attempted in every State. Reputed NGOs like VHAI and Karuna Trust have taken the responsibility of running PHCs in remote locations of Arunachal Pradesh. Non Governmental Specialists are being paid on a per case basis for work done in Government Hospitals. Under the Chiranjeevi Scheme in the 5 tribal districts of Gujarat, institutional delivery of BPL women is taking place in nursing homes of private gynaecologists at government's cost. NGOs are playing a very important role in facilitating ASHAs and community workers and in their capacity building efforts in every State. 2277 non governmental providers have been accredited under the Janani Suraksha Yojana.

12. Capacity Building initiatives : More than 1200 Programme Management, Finance Management and Data Management professionals have joined the system at State and District levels. More are joining as Block Public Health Managers in a few States. The introduction of these skills has improved programme management, monitoring and evaluation, financial reporting and record keeping. The National, the NE Regional and State Resource Centres are further strengthening this process. IMNCI

training for management of neonatal and childhood illnesses has been initiated in more than 25 States. Skilled Birth Attendant Training of MOs and ANMs, Training of MOs for Anaesthesia for emergency Obstetric Care, Training of MOs for Obstetric care, professional development programmes for MOs, District Planning and Appraisal programmes for NRHM State level teams, have been taken up on a large scale.

13. Decentralized planning and appraisal of District Health Action Plans : The process of decentralized planning has been initiated across the country with planning village upwards. Each and every district of Madhya Pradesh and Chhatisgarh has completed the District Planning process. The other States are also at an advanced stage of district planning. A grant of Rupees ten lakhs was provided to every district for decnetralised planning. Nearly all the 606 districts are expected to complete this process by March 2007. These District Health Action Plans have been prepared through a consultative process involving communities and health functionaries at each level. Chhattisgarh has undertaken the innovative exercise of developing a human development index for each Panchayat and for awarding Panchayats on the basis of their Human Development ranking.

14. Effective monitoring and evaluation : NRHM has set up effective systems of monitoring and evaluation. A detailed MIS that provides disaggregated information about performance with respect to vulnerable groups like SCs and STs, has been operationalized. An effective Financial Management Reporting System has become functional with quarterly, activity wise reports from States. A pilot initiative on community monitoring is being initiated in partnership with NGOs. The Institute of Public Auditors of India has started field work in five States (Bihar, Assam, UP, Tamil Nadu and Kerala). Assessment of ASHA programme in MP, Rajasthan, Orissa, UP, Bihar is under way with the support of UNFPA / Unicef. A system of independent assessment of performance of States by institutions of excellence is in the process of finalization. An intensive field based joint review mechanism is in place for the RCH - II that covers core areas of NRHM as well. Three such reviews have already been conducted.

The Way Ahead

As is evident from the Table on progress, a lot has been achieved in the last two years in partnership with States. This is a sector that requires simultaneous action on many fronts. The institutional platform of Village Health and Sanitation Committees, the Rogi Kalyan Samitis and the Panchayati Raj Institution committees at various levels is providing a rare opportunity for convergent action on all determinants of health. An army of locally resident Accredited Social health Activists with strong referral links with the strengthened health system will put even greater pressure on the public sector health system to deliver quality services. Along with need based and transparent partnerships with non governmental providers for public health goals, the strengthened system will have positive consequences for all interventions, whether they are for family welfare, disease surveillance, National Health Programmes, etc. The innovative engagement of human resource as per need and the arrangements for incentives at each level will help craft a new and innovative system of public health delivery. The experience of the last two years gives us the confidence that we are on the right track and that we need to deepen institutional reforms and effective decentralization through a concerted effort at capacity building. The setting up of a National Health System Resource Centre is a step in that direction. States are

also in the process of setting up their resource Centres. The North Eastern Regional Resource Centre is already playing a critical role in developing need based programmes in the eight North Eastern States.

TRAINING DIVISION

Availability of qualitative services to the community depends largely upon the efficacy with which health functionaries discharge their responsibilities, which, in turn would depend mainly upon their education and training. Department of Family Welfare had recognized the crucial role of training of health personnel in providing effective and efficient health care to the rural community from the very beginning of the Five Year Plans.

The pre-service and in-service training for different categories of health personnel are imparted through the following schemes / activities:

Training of ASHA under NRHM

The Government of India in April 2005 has launched the NRHM to improve access of people, especially the poor women and children to quality primary health care services. Accredited Social Health Activist (ASHA) is a major strategic intervention under the mission.

ASHA is envisaged as a trained woman community health volunteer who will reinforce community action for universal immunization, safe delivery, the care of the new born prevention of water borne and communicable diseases, improved nutrition and promotion of household sanitary toilets.

Capacity building of ASHA is critical in enhancing their effectiveness and this has been seen as a continuous process. The induction training of ASHA would be completed in 23 days spread in five rounds over a period of 12 months to be followed by periodic re-training for about two days once every alternate month. 265024 ASHAs are trained in 18 high focus States.

The scheme which was initially introduced for only 10 high focus states namely, Uttar Pradesh, Uttaranchal, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Orissa, Rajasthan, Assam and Jammu & Kashmir under NRHM, has been extended to NE states and tribal areas of other states. Whereas in rest of the country states Governments may opt for Link Workers (similar as ASHA) in their Project Implementation Plan (PIP) under RCH-II.

Progress made in selection and training of ASHAs is given in the following table:

Sector	No. of ASHAs proposed for the Mission period 2005-10	No. of ASHAs selected during 2005-06	No. of ASHAs selected during 2006-10	Total selected	Total Trained
In 10 High focus States	406530	119983	252249	356610	249859
In NE High focus States	467979	9058	24871	33929	15165
In Tribal areas of others states	21643	0	0	0	0
Link Workers in other areas	116934	0	91013	91013	81275
Total	**592086**	**129041**	**368133**	**481552**	**346299**

Centrally Sponsored Scheme of "Basic Training of ANM/LHV"

ANMs/LHVs play a vital role in MCH and Family Welfare Services in the rural areas. It is therefore, essential that proper training be given to them so that quality services be provided to the rural population. For this purpose Department of Family Welfare provides financial assistance under the scheme, to the states, to run 336 ANM/Multipurpose Health Workers (Female) schools with an admission capacity of approximately 13,000 and 42 promotional training schools for LHV/ Health Assistant (Female) with an admission capacity of 2600.

These training institutions impart pre-service training to prepare required number of ANMs and LHVs to man the Sub centres, Primary Health Centres, Community Health Centres, Rural Family Welfare Centres and Health posts in the country. The duration of the training programme of ANM is one and half years and minimum admission requirement for this course is 10th pass. Senior ANM with five years of experience is given six months promotional training to become LHV/ Health Assistant (Female).

The staffing pattern of the school for, which financial assistance is provided by the Department of Family Welfare, varies according to the annual admission capacity of the school. The financial pattern of assistance has been revised w.e.f. 7.2.2001. Other approved costs besides salary to staff are stipend to trainees, contingency and rent to such schools which are functioning in rented buildings.

Centrally Sponsored Scheme of "Basic Training for the Multi Purpose Health Worker (Male)"

The Basic Training of the Multi Purpose Health Worker (Male) scheme was approved during the 6th Five-Year Plan and taken up since 1984, as a 100% Centrally Sponsored Scheme. This pre-service training is provided through Health & Family Welfare Training Centres and also through basic training schools of Multipurpose Health Workers (Male). The training is of one-year duration and on successful completion of the training, the Male Health Worker is posted at the Sub-Centre along with an ANM/ Health Worker (Female).

The financial pattern of assistance for this scheme has been revised since 7.2.2001. Under the scheme the salary of the staff, rent for school and hostel, stipend for trainees, educational aids and training material, hiring charges for buses and contingency expenses are supported.

Maintenance of Health and Family Welfare Training Centres

47 Health and Family Welfare Training centres were established in the country in order to improve the quality and efficiency of the Family Planning Programmes and to bring about changes in the attitude of the personnel engaged in the delivery of health services through in-service training programmes. These training centres are supported under the Centrally Sponsored Scheme of "Maintenance of Health and Family Welfare Training Centre".

These training centres are now conducting various in-service training programmes of the Department of Family Welfare. Apart from in-service training, some of the selected centres are also responsible for conducting the basic training of Male Health Worker's course of one year. Apart from the salary of the staff of the training centres, other assistance under the scheme includes contingency for purchase of educational material, rent for training centres and payment to the guest faculty. The financial pattern of assistance for this scheme has been revised since 7.2.2001.

Strengthening of Basic Training Schools

This scheme is launched in 10th plan period with a plan period allocation of 10 crores. The main objective of the scheme "Strengthening of Basic Training School" is physical strengthening of the ANM / LHV training schools. The provision under the scheme is maximum of Rs. 21.5 lakhs per ANM / LHV School for Repair / up-gradation for the buildings - Training Centre, hostel and the field practice area, furniture and equipment and books / A.V. aids.

During the year 2005-06, Rs.203.86 lakh were released to the 4 states of Mizoram, Tamil Nadu, Nagaland and Orissa for strengthening of 13 ANM Training Schools under the scheme and during 2006-2007 Rs.207.89 lakh were released to the 4 states of Kerala, Karnataka, Goa and Assam for strengthening of 12 ANM Training Schools.

Training under Reproductive and Child Health Training Programme

In RCH Phase II, for in-service training of Family welfare service providers, a decentralized approach has been adopted. States have been asked to submit their requirements for various Programme interventions in the Project Implementation Plan (PIP) including training requirements and accordingly funds are released to states from the Ministry of Health and Family Welfare from RCH Flexi Pool. The National Institute of Health & Family Welfare (NIHFW) has also been appointed as a Nodal Institute with support of 20 Collaborating training Institutes (CTIs) for training under NRHM and under RCH - Phase II. NIHFW has been made responsibility for organizing some centrally steered training programmes and monitoring the NRHM / RCH training activities throughout the country with the help of Collaborating Training Institutions (CTIs).

Professional Development Course (PDC)

The Professional Development Course in Management, Public Health and Health Sector Reforms for District Medical officers was launched with funding support under SIP by the European Commission. However with the end of SIP the course has been taken up as a centrally steered training programme under RCH-II. It has been made pre-requisite for their promotion to CMO / Civil Surgeon after the recommendation of CCH&FW. Realizing its relevance and importance, the course now is being rolled out in the entire country with the help of 13 identified training institutions (besides NIHFW). The NIHFW has been designated as the National Nodal Training Institute by the Ministry of Health and Family Welfare. During the year 2006-07, 264 District level Medical Officers have been trained in 15 batches making the total to 729 so far (as on 2nd April 2007).

Gandhigram Institute of Rural Health and Family Welfare Trust (GIRHFWT)

The trust was established in 1964 with financial support from the Ford Foundation, Government of India and Government of Tamilnadu. The Health and Family Welfare Training Centre at GIRHFWT is one of 47 such training centres in the country. At Gandhigram Institute of Rural Health and Family Welfare Trust (GIRHFWT), HFWTC functions as a Central Training Institute (CTI). It trains Health and Health related functionaries working in Primary Health Centres, Corporations / Municipalities, and Tamil Nadu Integrated Nutrition Projects. The type of training programmes included are : orientation training, refresher training, skill training on different Health and Family Welfare issues for various categories of health personnel which is affiliated to the Tamil Nadu Dr. M.G.R Medical University.

The Gandhigram Institute is also engaged in upgrading the capabilities of ANMs, staff nurses and students of nursing colleges through the Regional Health Teachers Training Institute (RHTTI). The RHTTI under the following activities during 2005-2006.

i. **Diploma in Nursing Education and Administration (DNEA):** 13 students were trained during 2004-05 and 7 during 2005-06.

ii. **Promotional course for the Female Health Workers and Auxiliary Nurse/ Midwives:** 18 students were trained during 2004-05 and 30 each during 2005-06 and 2006- 2007.

iii. **Short-term training in community health nursing:** In short term training in community health nursing out of total number of 943, 94 for GNM, 36 for DNEA, 672 for BSc, 41 for MSc and 120 for NGO were trained in all.

The institute has been conducting this one-year Diploma course since 1964 in order to prepare basic level professionals as health Educators.

Maternal Health Interventions under National Rural Health Mission and Reproductive and Child Health Programme Phase - II

1. High maternal mortality ratio (MMR) of 301 per 100,000 live births (RGI: 2001-03 Maternal Mortality Report) has been a major public health concern in India. It signifies that around 77 thousand women die every year due to causes related to pregnancy and childbirth. MMR for India and other major states are at Annexure - I.

2. In view of this, the National Population Policy 2000 has set the goal of reducing MMR to less than 100 per 100,000 live births by the year 2012. Several specific initiatives are under implementation to address this issue. These are under implementation in all States and UTs since 1992 (CSSM) and later during Reproductive and Child Health programme, Phase I and also in the Phase II. These interventions pertain to improving Essential Obstetric care; Emergency Obstetric Care; cash assistance to pregnant women from poor families to go to a health centre for treatment and management of complications of pregnancy; provision of drugs and equipment at Sub-centre, PHCs and First Referral Units (FRUs); provision of contractual staff- Medical manpower including specialists like Anesthetists and Gynecologists as well as paramedical staff for providing obstetric and newborn as well as child care. Funds were also provided to the states and UTs for making available 24 hours delivery services at selected Primary Health Centres and Community Health Centres. Focus was put on training of dais (traditional Birth Attendant). In order to increase access, funds have been provided for organizing Reproductive and Child Health camps in remote and under utilized Primary Health Centres in all districts of weak / EAG States.

3. The results of the RCH household surveys carried out in all 593 districts and the results of the National Family Health Surveys, the latest being the NFHS-III (2005-06), reveal that there has been improvement in provision of ante-natal care, institutional and safe deliveries and post-natal care. There are however some critical gaps in the delivery of services causing impediments to attaining the national health policy goal. The State-wise details of the key maternal health indicators are enclosed at Annexure - II.

4. With a view to increase access to quality health care including services in Immunization and Safe Motherhood, Government has launched the National

Rural Health Mission (NRHM) in the year 2005 with special emphasis on rural population throughout the country. Eighteen states which have weak public health indicators and / or weak infrastructure have been identified as high focus states. These States are Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Manipur, Mizoram Meghalaya, Madhya Pradesh, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Uttaranchal and Uttar Pradesh. The Mission will operate over a period of seven years from 2005 to 2012.

5. Under the NRHM (2005-2012) and the RCH Programme Phase-II (2005-10) the Government of India is actively pursuing the goals of reduction in Maternal Mortality by focusing on the 4 major strategies of essential obstetric and new born care for all, skilled attendance at every birth, emergency obstetric care for those having complications and referral services. The other major interventions are provision of Safe Abortion Services and services for RTIs and STIs.

6. **Essential obstetric care:**

   - This includes antenatal care, institutional / safe delivery services and post natal care. For timely and early detection of emergencies it is of utmost importance that a minimum of three ante-natal checkups be conducted wherein all the components of essential obstetric care be provided to the women. Government has instructed all states and UTs to focus on these services and monitor them closely.
   - Provision of 24 Hrs Delivery Services at PHCs and CHCs: Under RCH - II, all the CHCs and 50% of the PHCs are proposed to be operationalized for providing round the clock delivery services. The States and UTs have been advised to make a comprehensive plan and the central Government is investing a large amount of money for operationalising these PHCs.
   - Post natal care for mother and newborn: Ensuring post natal care within first 24 hours of delivery and subsequent home visits on day 3 and 7 are the important components for identification and management of emergencies occurring during the post natal period. The ANMs, LHVs and staff nurses are being made aware of and also being oriented for tackling emergencies identified during these visits.

7. **Skilled Attendance at Birth:** To manage and handle some common obstetric emergencies at the time of birth, the Government of India has taken a policy decision to permit Staff Nurses and ANMs to give certain injections and also perform certain interventions under specific emergency situations to save the life of the mother. There is a commitment to provide skilled attendance at every birth and for implementing this we first need to train our SNs / ANMs as SBAs who can function at community level.

8. Provision of Emergency Obstetric and Neonatal Care at FRUs by operationalising all FRUs in the country. While operationalization, the thrust should be on the critical components such as manpower, blood storage units and referral linkages etc. Availability of trained manpower (Skill Based Training for MBBS doctors) should be linked with operationalization of FRUs.

9. **Referral Services at both Community and Institutional level :** Establishing referral linkages between the community and First Referral Units is an essential component for utilization of services particularly during Emergencies .Since emergencies during the process of birth can not be predicted, it is essential to

place effective referral linkages which can be accessed by all pregnant women in case of emergency.

10. **Training of MBBS Doctors in Life Saving Anesthetics Skills for Emergency Obstetric Care :** Provision of adequate and timely Emergency Obstetric Care (EmOC) has been recognized globally as the most important intervention for saving lives of pregnant women who may develop complications during pregnancy or childbirth. The operationalization of First Referral Units, at sub-district i.e. CHC level for providing EmOC to pregnant women is a critical strategy of RCH-II, which needs focused attention. It has not been possible to operationalise these FRUs till now due to various factors most pertinent being shortage of specialist manpower, i.e. gynecologist and Anesthetist, particularly at district and sub district level.

    In view of this, for effective and better management of Emergency Obstetric needs at the grass root level, GOI has taken a policy decision and is implementing 18 weeks programme for training of MBBS doctors in anesthetic skills for Emergency Obstetric care at FRU.

    The training shall be undertaken for only that number of MBBS doctors who are required for the operationalisation of FRUs and CHCs and shall be limited to the requirement of tackling emergency obstetric situations only. In no way, will it be a replacement of the specialist anesthetists who are working after pursuing degree / diploma in the subject.

    Guidelines for the training programme have been disseminated to the States for taking initiatives in identifying the medical colleges in the state where this training programme can be conducted. Training is already underway and till March 2007, 41 doctors have been trained in Life Saving Anesthetic Skills and are successfully practicing these skills.

11. **Obstetric Management Skills :** Government of India has also introduced training of MBBS doctors in Obstetric Management Skills in collaboration with Federation of Obstetric and Gynecological Society of India. It had prepared a 16 weeks training programme in obstetric management skills including Caesarian Section operation, and this is also being implemented.

12. **Safe Abortion Services / Medical termination of Pregnancy (MTP):** It is an important component of the ongoing RCH Programme and it is one of the means of reducing maternal mortality. 8% of the maternal deaths are due to unsafe abortions. For expanding and strengthening safe abortion services under RCH Programme, the MTP Act and Rules have been amended in 2002-03 for delegation of powers to recognize MTP centres to the district. Provision of MTP services at 24 X 7 PHCs, CHCs and FRUs are being strengthened by training of medical manpower in techniques of MTP by the States.

13. **Provision of RTI / STI services at all FRUs, CHCs and at 24 X 7 PHCs is also being made under RCH II :** Convergence with the National AIDS Control Programme (NACP) is envisaged in provision of these services, in terms of utilization of services for case management, laboratory services, counseling services, drugs, equipments, blood safety etc.

14. **Prophylaxis and treatment of Nutritional Anemia:**

    As per results of NFHS III (2005-06), 56.1% of ever married women aged 15-49 years are Anemic. The problem is more sever during pregnancy, with 57.8% of

pregnant women (15-49 years) being anemic. A programme for prophylaxis and treatment of anemia has been under implementation through out the country since 1997-98. Under this programme all pregnant and lactating are provided with one tablet (containing 100 mg of elemental iron and 5 mg of Folic Acid) daily for 100 days. Those who have severe anemia are provided with double dose of these tablets.

15. **Setting up of Blood Storage Centers (BSC) at FRUs** : Timely treatment of complications associated with pregnancy is sometimes hampered due to non-availability of Blood Transfusion services at FRUs. The Drugs and Cosmetics Act has been amended to facilitate establishment of Blood Storage Centers at such FRUs.

16. **Janani Suraksha Yojana :** Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NRHM) being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. The Yojana, launched on 12th April 2005 is being implemented in all states and UTs. JSY is a 100 % centrally sponsored scheme.

    (a) The Yojana has identified ASHA, the accredited social health activist as an effective link between the Government and the poor pregnant women in l0 low performing states, namely the 8 EAG states and Assam and J&K, the remaining NE States and tribal districts of all other States. Her main role is to facilitate pregnant women to avail services of maternal care and arrange referral transport.

    (b) The scheme focuses on the poor pregnant woman with special dispensation for states having low institutional delivery rate namely the states of Uttar Pradesh, Uttaranchal, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Assam, Orissa, Rajasthan and Jammu and Kashmir. While these states have been classified as Low Performing States (LPS), the remaining states have been named as High performing States (HPS).

17. **Referral Services at both Community and Institutional level :** Establishing referral linkages between the community and the First Referral Units is an essential component for utilization of services particularly during emergencies. Since emergencies can not be predicted, states have been advised to develop strategies to establish effective referral linkages which can be accessed by all pregnant women in case of emergency.

18. **Village Health and Nutrition Day :** Organizing of Village Health & Nutrition Day (VHNDs) at Anganwadi center at least once every month to provide ante natal / post partum care for pregnant women, promote institutional delivery and health education apart from other various services. As per information from the states 19.95 lakhs of VHNDs have been organized till March 2007.

19. **Indian Public Health Standards (IPHS):** Implementation of Indian Public Health Standards (IPHS) for Primary Healthcare Facilities, will ensure quality of services by providing infrastructure, equipments and specialist man-power.

FAMILY PLANNING PROGRAMME

In order to achieve population stabilization, the National Population Policy 2000 and the Tenth Five Year Plan laid great emphasis on addressing the unmet need for contraception. NFHS -III (2005-06) indicate that the unmet demand (currently married

women who want no more children but are not using a method of contraception), both for limiting and spacing, continue to remain high in most states.

The performance figures for sterilization operations have shown a dip of 3.8 % from 2005-06 to 2006-07. IUD insertions too declined by 3.6% and condom acceptance declined by 0.4%. OP usage alone has gone up by 9.2% (in case of condoms and OP the usage figures account for both free distribution and supply via social marketing).

The achievements with regard to contraceptive usage in the two subsequent years are as follows:

Methods	Achievement (in lakhs)	Change in %	
	2006-07	2005-06	
Sterilization	4,514,092	4,691,975	-3.8
IUD insertions	5,945,859	6,168,584	-3.6
Condom users	20,630,468	20,718,296	-0.4
OP	8,946,014	8,194,545	9.2

Other Methods

The acceptance of spacing methods in the country is still very low in spite of the large unmet need. IUD 380A was introduced in India in 2002 replacing the earlier CuT 200 in view of its efficiency, longer effectiveness and cost effectiveness. However there has been no increase in the acceptability of IUD and one of the reasons is lack of skilled manpower.

To address this problem an Alternative Methodology of Training in IUD services is being

Launched using Zoe anatomic pelvic models. The pilot phase of this intervention is currently being started in one district each of 12 states spread all over the country.

Emergency Contraceptive Pills (ECP) were introduced for the first time in the NFWP '02-'03. It prevents unwanted pregnancy after an unprotected act of sexual intercourse. A manual is being formulated to provide guidelines for the administration of ECPs to all service providers.

No Scalpel Vasectomy(NSV)

The male sterilization was the most accepted contraceptive method during the sixties in India forming nearly 70-80% of the total sterilizations. However, this high acceptance came down to around 2-3% of the total sterilization due to various reasons. With the aim to bring men to the forefront in population and reproductive health programmes and share the responsibility of family planning special budgetary provisions have been made in the tenth plan under the Male Participation which will also address gender equity concerns.

To overcome the main problem of lack of skilled service providers in NSV, the GOI has come out with a District Trainers Training strategy wherein every district is to be provided with 1 district trainer who would be responsible for providing service to the acceptors as well as training to other doctors . Under this 264 districts have been covered till date.

To mainstream the training for NSV in Medical education, training of faculty

members of the Surgery departments of Medical Colleges is being taken up at 7 centers across the country.

The GOI has also enhanced the Compensation package to be paid to the acceptors of sterilizations services to compensate for their loss of wages incurred while accepting the procedure.

The GOI has also started the National Family Planning Insurance Scheme in November 2005 wherein compensations are paid to the clients or their dependants in the unlikely and unfortunate events of deaths, complications and failures and the surgeons are also covered under an indemnity insurance to take care of any litigation they may face for any case of death, complication or failure

PROHIBITION OF PRE-CONCEPTION AND PRE-NATAL SEX DETERMINATION

In order to check female foeticide, the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 was enacted and brought into operation from 1st January, 1996. The Act prohibits determination and disclosure of the sex of the foetus. It also prohibits any advertisements relating to pre-natal determination of sex. Punishments are prescribed for contravention of any of its provisions, like imprisonment up to 5 years and fine up to Rs.1,00,000/- in addition to cancellation of the registration/license in the case of medical professionals/ diagnostic centres, clinics, etc..

The Act and the Rules framed thereunder have been amended with effect from 14th February, 2003 to ban selection of sex before or after conception and to remove difficulties in the implementation of the Act keeping in view certain directions of the Hon'ble Supreme Court of India.

Appropriate Authorities at the District level implement the Act. A National Inspection and Monitoring Committee has also been constituted at the Centre to take stock of the ground realities by field visits to the problem States. A National Support & Monitoring Cell (NSMC) has been constituted to strengthen implementation of the Act in the country.

In order to make the Pre-Conception & Pre-Natal Diagnostic Techniques Act and the Rules framed thereunder even more effective and stringent; the Central Government is considering to further amend the Act and the Rule."

Routine Immunization Programme

Immunization programme is one of the key interventions for protection of children from life threatening conditions, which are preventable. Immunization Programme in India was introduced in 1978 as Expanded Programme of Immunization. This gained momentum in 1985 as Universal Immunization Programme (UIP) and implemented in phased manner to cover all districts in the country by 1989-90. UIP become a part of Child Survival and Safe Motherhood Programme in 1992. since, 1997, immunization activities have been an important component of National Reproductive and Child Health Programme. Immunization is one of the key areas under National Rural Health Mission (NRHM) launched in 2005.

Under the Immunization Programme Government of India is providing vaccination to prevent six vaccine preventable diseases i.e. Tuberculosis, Diphtheria, Pertussis, Tetanus, Polio, and Measles. The vaccination schedule is as under:

BCG (Bacillus Calmetter-Guèrin)- Birth

DPT (Diphtheria, Pertussis and Tetanus Toxoid)- 6,10,14 weeks and at 16-24 months of age

OPV (Polio)- 6,10,14 weeks & 16-24 months of age and birth dose for institutional delivery

Measles - 9-12 months of age

DT (Diphtheria and Tetanus Toxoid) - 5 years of age

TT (Tetanus Toxoid) - 10 years and 16 years of age

TT - for pregnant woman two doses or one dose if previously vaccinated within 3 years

To further strengthen the Routine Immunization, with the aim to improve the coverage, Government of India has taken the following initiatives as part of NRHM since 2005-06:

- Introduction of AD syringes for all immunization replacing the existing glass syringe and needles.
- Downsizing the BCG vial from 20 dose to 10 dose.
- Plans for alternate vaccine delivery from PHC to Sub centre and outreach sessions.
- Outsourcing immunization activities in urban slums and under served areas.
- Strengthening supervision and monitoring.
- Mobility support to District Immunization officer for supportive supervision and monitoring.
- Review meeting at the State level with the districts on 6 monthly basis.
- Mobilization of children to immunization session sites by Accredited Social Health Activist. (ASHA), Link workers, Women Self Help Groups etc.
- To improve the immunization coverage in low performing state viz. EAG States and N.E. States, Special Immunization Weeks / Catch-up Rounds are being observed in these States.

All the States / UTs are asked to prepare their own State Programme Implementation Plan (PIP) for Immunization as part 'C' of NRHM PIP from the year 2005-06 to address specific needs.

INDIAN NURSING COUNCIL

The Indian Nursing Council is a statutory body constituted under the Indian Nursing Council Act, 1947. The Council is responsible for regulation and maintenance of uniform standards of training for Nurses, Midwives, ANMs and Lady Health Visitors in India. The Council prescribes the syllabi and regulations for various Nursing Courses. At present 1602 GNM Schools, 440 ANM Schools, 817 Colleges of Nursing for conducting graduation programme and 91 Colleges of Nursing for conducting post graduate course in Nursing are functioning in the Country upto 31.3.2007. On an average 25-30 thousand Nurses and 10-12 thousand ANMs qualify every year. So far 9,28,194 GNM and 5,26,242 ANMs have been registered with various State Nursing Councils up to 31st December 2006.

PULSE POLIO IMMUNIZATION

In the pursuance of the World Health Assembly resolution of 1988, in addition to administration of routine OPV through the Universal Immunization Programme, the Pulse Polio Immunization (PPI) Programme was launched in 1995-96 to cover all

children below the age of 3 years. In order to accelerate the pace of polio eradication, the target age group was increased from 1996-97 to all children under the age of 5 years. Til 1998-99, the PPI programme consisted of vaccination of children at fixed booths on the National Immunization Days (NIDs) held twice, separated by six weeks, during the winter season.

Inspite of very good coverage during NIDs 5-6 percent of children were being missed even in the PPI programme. During 1999-2000 therefore, in addition to booth immunization, a house-to-house search of missed children and vaccinating them on the next 1-3 days following each NID / Sub NID was undertaken. This house-to-house programme resulted in identification and vaccinating 2.3 crore children who had never been fascinated before. Total number of children vaccinated during each NID round in the country is about 17 crore.

Significant progress has been achieved in controlling transmission of Wild Poliovirus Type-2 Polio Virus has been eliminated since 1999. Type-3 circulation is restricted mainly in West U.P. districts. Type-1 Polio Virus circulation is also limited to the endemic districts of Uttar Pradesh and Bihar.

During 2007, As of now (27th July 2007) 124 cases have been reported -39 are of wild polio virus type 1 (WPV1) and are of wild polio virus type 3 (WPV3). The geographical spread is restricted to 39 districts. The State-wise polio cases reported from 1998 is enclosed. The following Strategies for controlling the transmission of polio virus in the country during 2007-08 have been adopted:-

- 2 NIDs and 4 SNIDs in UP, Bihar and other endemic districts and States have been implemented in the first 7 months of the year 2007. The May SNID was extended to cover other vulnerable States like Orissa, Andhra Pradesh, Assam Chhattisgarh, Jharkhand, Haryana, Punjab, Gujarat, Chandigarh and high risk districts of MP, West Bengal and Karnataka.
- Bihar did an additional campaign in 17 high-risk districts.
- Monovalent vaccine type 1 (mOPV1) was used in most rounds of 2007 in the endemic areas of West UP and Bihar.
- To contain P3 circulation mOPV3 was used in 5 districts of Western UP in March and tOPV in whole of UP in April round and mOPV3 in 18 western districts during July 1st 2007 SNID.
- 4 rounds of SNID would be conducted in the second-half of 2007 (August-December, 2007) mOPV1 will be used during these rounds
- SIA will be carried out in response to the detection of Wild Polio Virus in other parts of the country.
- 2 NIDs will be implemented in January and February, 2008
- For vaccinating the children in transit, vaccination booths are being setup at Railway Stations, inside long distance trains, major bus-stop, major road-crossing, religious congregation etc. and by that more than 5 million children are being vaccinated in UP, Bihar and Mumbai during each round.
- Mobile population from Bihar, UP would be identified, quantified and mapped in Punjab, Haryana, Delhi and Mumbai and this population would be covered along with the planned SNIDs with UP and Bihar during second half of 2007.
- To ensure team have participation of ASHA for mobilization and vaccination of the children.

- The missed children during SNIDs will be mobilized by ASHA / AWW and vaccinated during the monthly heath days.
- Strategy to involve the leaders and opinion makers of the underserved community is being adopted in Western UP districts to involve the community better in the programme.
- Partners' agencies like UNICEF, Rotary, CORE have engaged community mobilizers in underserved areas to motivate the community.
- States are being urged to improve Routine Immunization coverage and thereby increase community immunity so that Polio virus does not reestablish circulation in these States.

Material for Para on Safe Abortion Services / Medical termination of Pregnancy (MTP)

Provision of Safe Abortion Services in accordance with the MTP Act is an important component of the ongoing RCH Programme Phase II and it is one of the means of reducing maternal mortality. As per the latest Survey Report of the office of RGI (RGI-SRS 2006), 8% of maternal deaths are due to unsafe abortions. For expanding and strengthening safe abortion services under the RCH Programme, the MTP Act 1971, Rules and Regulations have been amended in 2002-03 for delegation of powers to recognize MTP centres to the district level and also provides for specific punitive measures for performing MTPs by unqualified persons and in places not approved by the government. Provision of MTP services at 24 X 7 PHCs, CHCs and FRUs are being strengthened by training of medical manpower in techniques of MTP by the States.

Nutrition

The Nutrition Cell in the Directorate General of Health Services provides technical advise in all matters related to Policy making, Programme implementation, monitoring & evaluation, training content for different levels of medical and para medical workers. It takes up technical scrutiny of standards and labels for foods, proposals, project evaluation, review of research projects, etc.

The cell has been making efforts in creating awareness regarding prevention of micronutrient deficiency disorders, diet related chronic disorders and promotion of healthy life style thro ugh dissemination of various types of IEC material. So far, Posters and pamphlets on the above mentioned issues, video spots on IDD were developed. Production of video film on Undernutrition and Promotion of Healthy Life Styles and 'reviewing & updating the publication entitled 'Guidelines for Standardized Hospital Diets' activities are under active process.

The Cell organizes meetings and workshops (national & regional level workshops) on core issues related to nutrition i.e. micronutrients, hospital diets, fluorosis, Diet Related Chronic Disorders & Promotion of Healthy Life Style etc. A national programme on prevention and control of Fluorosis in the country is to be launched shortly.

Coordination and review technical, administrative, budgetary matters relating to the Pilot Programme for Control of Micronutrient Deficiency have been under taken. The Nutrition Cell also keeps State Nutrition Divisions, located in 17 States / Uts updated on developments in the field of nutrition, micronutrient deficiencies and diet related chronic non-communicable diseases.

16 Housing

HOUSING is a State subject. The Union Government is, however, responsible for the formulation of policy with regard to programme and approaches for effective implementation for social housing schemes, particularly those pertaining to weaker sections of the society. A comprehensive Housing and Habitat Policy, 1998 was formulated to address the issues of sustainable development, infrastructure and for strong public-private partnership for shelter delivery. The objectives of the policy are to create surpluses in housing stock by creating an enabling environment and facilitate construction of two million additional dwelling units each year. It also seeks to ensure that housing along with supporting services is treated as priority sector at par with infrastructure. The Central theme of the policy is strong public-private partnership for tackling housing and infrastructure problems.

The Government would provide fiscal concessions; carryout legal and regulatory reforms and create an enabling environment. The problem of housing shortage compounded with the population explosion has also been addressed by this policy. This document clearly identifies the respective roles of the Central Government, the State Government, local authorities, financial institutions, research standardisation and technical institutions. However, since housing is a state subject, State Governments have to play the primary role in formulating specific action plans and programmes suited to local needs and conditions duly involving local bodies and citizen groups. The Government has identified 'Housing for All' as a priority area, with particular emphasis on the needs of vulnerable groups. It is proposed to facilitate construction of 20 lakh additional units every year, with emphasis on Economically Weaker Section (EWS) and Low Income Groups (LIG) of the population as also the needs to SC / ST and other vulnerable groups. Out of 20 lakh additional houses, seven lakh houses are to be constructed in urban areas and the remaining 13 lakh in rural areas.

The Ministry of Housing and Urban Poverty Alleviation as part of its consultation process, organised a conference of Housing Ministers of States / UTs on 29-30 November 2004 at New Delhi to share the special initiative undertaken by the various States / UTs, NGOs and other Stakeholders to address the issues of housing and habitat, especially for the EWS / LIG, and to have their valuable suggestions and recommendations for incorporating realistic corrections in the policies of schemes implemented by the Government for achievement of the goals "Housing for All". The Government of India is actively engaged to suitably revise the existing National Housing and Habitat Policy, 1998 through consultative process. The revised policy is now under consideration of this Ministry and is at final stage. The new policy would accelerate supply of serviced land housing with particular focus on EWS and LIG categories.

The Working Group of the Planning Commission on Urban Housing for the Tenth Plan (2002-2007) has estimated that 22.44 million dwelling units would be required by the end of Tenth Plan by way of addition / upgradation. In order to facilitate construction of adequate housing facilities, particularly for EWS and Low Income Group, the Government launched the 'Two Million Housing Programme', which is under operation since 1998-99, which envisages facilitating construction of 20 lakh

additional units every year. Out of which, 7 lakh would be taken up for construction in Urban areas and 13 lakh houses would be taken up in Rural areas. In Urban areas, this loan-based programme is implemented through HUDCO, Cooperative Sector, National Housing Bank / Commercial Banks and Housing Financial Institutes.

NATIONAL BUILDING ORGANISATION

The National Building Organisation (NBO) is an attached office of the Ministry of Housing and Urban Poverty Alleviation. It was established in 1954 for technology transfer, experimentation, development and dissemination of housing statistics. It was restructured in August 1992 to function as a data bank and management information centre for socio-economic aspects of housing.

To keep up current requirements under the National Housing Policy and various socio-economic and statistical functions connected with housing and building activities and also to ensure that plan / schemes of the Ministry is properly monitored, NBO restructured in 2006 with revised mandate. The mandate of the National Buildings Organisation in its restructured form is (a) To collect, collate, validate, analyse, disseminate and publish the housing and building construction statistics, (b) to organise training programmes for the officers and staff of the State governments engaged in collection and dissemination of housing and building construction statistics, (c) to create and manage a documentation centre relating to housing, poverty, slums and infrastructure related statistics, (d) to coordinate with all the State governments / Research Institutions / UNCHS / International Bodies, etc., as being a nodal agency in the field to cater to the statistical needs of the planners, policy makers and research organisation in the field of housing and related infrastructural facilities, (e) to conduct regular short-term sample surveys in various pockets of the country to study the impact of the plan schemes which are being run by this Ministry by utilising the service of the staff so employed on contractual basis. At least two such studies will be conducted in a year, (f) to undertake special Socio-Economic studies evaluating the impact of the plans, policies and programmes in the field of housing and infrastructure, as and when required, by the Ministry for which the additional funds will be provided by the Ministry and, (g) to undertake any work assigned by the Ministry from time to time.To achieve the above mandate the restructured National Buildings Organisation have two divisions, i.e., Socio-Economic Division and Administration Division.

CENTRAL GOVERNMENT EMPLOYEES WELFARE HOUSING ORGANISATION

The Central Government Employees Welfare Housing Organisation, a body of the Ministry of Housing and Urban Poverty Alleviation, Government of India, a Society registered under the Societies Registration Act., 1860, specifically created for execution of housing projects for Central Government employees, on all India basis. This organisation has a mandate to construct houses on no profit – no loss basis. It builds houses on self-financing basis. The CGEWHO has at present, to its credit, on-going housing schemes at Noida (Ph-V) (576), Panchkula (Ph-II) (240), Lucknow (130), and Chennai (Ph-II) (540), Hyderabad (Ph-III) (380) with 1884 dwelling units under various stages of construction and planning. Nineteen of the CGEWHO's projects at Chennai (Ph I) (524), Nerul, Navi Mumbai (384), Sector 14, Panchkula (Phase-I) (98), Kolkata (Ph I) (576), Sector-51, (NOIDA-Ph I & II) (1200), Kharghar, Navi Mumbai (1230), Sector-56, Gurgaon (Ph I & II) (1940), Chandigarh (305), Bangalore (Ph-I)(603),

Hyderabad (Ph I) (344), Kochi (43), Pune (Phase I) (159), Sector-82, NOIDA (Ph III & IV) (1700), Ahmedabad(310) Jaipur (184) and Hyderabad (Ph-II) (182) have been completed. ii) Based on demand surveys, as conducted by the Organisation, a number of stations in different parts of the country have been identified, for the execution of housing projects. iii). Besides the present scheme, forth-coming schemes for the year 2007, may include Kolkata (Ph II), Greater Noida (Phase I), Gurgaon (Ph III), Bangalore (Ph-II) and Pimpri Chinchwad, Pune (Ph-II). Website www.cgewho.nic.in.

NATIONAL COOPERATIVE HOUSING FEDERATION OF INDIA

The National Cooperative Housing Federation of India (NCHF), set in 1969, is the national apex organisation spearheading the entire cooperative housing movement in India.

The primary objective of the NCHF is to promote, guide and coordinate the activities of housing cooperatives. All the 26 State level Apex Cooperative Housing Federations are members of the NCHF. There are 94,000 primary housing cooperatives functioning in the country with a membership of over 6.5 million. The NCHF has been assisting under Two Million Housing Programme. It has mobilised cooperative sector. From 1998-99 to 2005-06, 7,67,632 dwelling units were financed with sanctioned of Rs. 9700 crore.

HINDUSTAN PREFAB LIMITED

The Hindustan Prefab Limited (HPL) is wholly-owned by the Government of India. The Company is engaged in the production of pre-fabricated materials like Railway Sleepers, PC Electric Poles, etc. It is now a loss making PSE. A decision has been taken to revive / restructure the functioning of HPL. The case for its revival / restructuring has been referred to the Department of Public Enterprises for consideration by the Board for Reconstruction of Public Sector Enterprise (BRPSE). Recommendations of BRPSE are still awaited.

HOUSING AND URBAN DEVELOPMENT CORPORATION LIMITED

HUDCO, since its inception in 1970, has made steady and significant strides in the field of housing and urban infrastructure financing, to emerge as the pioneer and the trend-setter. Catering to the needs of every section of the population, with a basket of delivery options both in housing and urban infrastructure development, HUDCO aims to achieve sustainable growth in these sectors. Having emerged as the market leader in its operational arena, HUDCO aims at consolidating its positions and enhancing the performance by laying emphasis on its core competencies and exploring diversified avenues of service delivery.

The effective span of HUDCO omnipresent umbrella could be gauged by the fact that on an average, one in every 16 houses in the country has invariably availed HUDCO's assistance. This has earned the institution the rare distinction of being in the array of the largest facilitators of housing across the globe.

HUDCO, during the three decades of its existence, has extended assistance for taking up over 142 lakh dwelling units both in urban and rural areas. In sharp contrast to the policy adopted by the contemporary housing finance companies in the fraternity, of targeting the affluent middle and high income groups, HUDCO's assistance covers the housing needs of every class of the society, with special emphasis on the weaker sections and the deprived. The social mandate in line with HUDCO

motto of “Profitability with Social Justice” envisages about 95 per cent of the total dwelling units sanctioned by HUDCO are for the economically weaker section and the low income group.

The country is affected by various natural calamities. Consequent upon these natural calamities, HUDCO has responded spontaneously to the rehabilitation of the victims of these natural calamities. Cumulatively till 31 March 2006, HUDCO has been able to contribute over 41 lakh houses in disaster affected regions with project cost of over Rs. 4102 crore and HUDCO’s financial assistance of Rs. 2210 crore. HUDCO has been advocating pre-disaster mitigation and risk reduction involving Prediction, Prevention, Publicity and Protection, as against the prevalent post-disaster actions of Rescue, Relief, Rehabilitation, Reconstruction, Repairs, Renewals and Retrofitting.

The urban infrastructure window of HUDCO opened in 1989, has sanctioned a total of 1230 projects (excludes sanitation schemes) with a total project cost of Rs.149228 crore and HUDCO financial assistance of Rs. 47887 crore, contributing to the improvement in the physical quality of life of the citizens at large in the urban areas.

With the cost of construction increasing year after year, housing is becoming beyond the reach of most sections of the society and the need for utilising cost-effective technologies has become imperative. HUDCO has been promoting the use of alternative building materials and appropriate technologies to ensure cost-effective, environment-friendly, ecologically appropriate, energy saving and yet aesthetically pleasing and affordable housing. The question of transfer of technology at the grassroot level is addressed by the support extended to the establishment of 584 Building Centres in urban areas and 80 Building Centres in rural areas across the country.

TOTAL HUDCO OPERATIONS DURING 2006-07

HUDCO during the year 2006-07 has achieved sanctions of Rs.12162 crore providing assistance for construction of a 140970 dwelling units, over 780026 sanitation units, 101 urban infrastructure projects throughout the country. The loan released during the year amounted to Rs. 3453 crore.

Cumulatively till 31 March 2007, HUDCO has sanctioned 15752 schemes involving a total project cost of Rs. 228930 crore (excludes HUDCO Niwas) with loan component of 75954 crore. An amount of Rs. 56790 crore has been released HUDCO’s assistance has helped in the construction of 141 lakh residential units, about 59.67 lakh sanitation units and in undertaking 1328 urban infrastructure schemes effectively improving the living conditions in the urban and rural areas, in over 1807 towns and thousands of villages.

ESTABLISHMENT OF ADARSH GRAM / ADARSH BASTI

HUDCO continued its programme for development of Model Villages (Adarsh Gram) and Model improved Slums (Adarsh Basti) for providing integrated inputs of physical planning, architectural design, efficient utilisation of land and appropriate technologies ensuring user participation, use of innovative / renewable sources of energy, etc., with a convergence mode in all the States and Union Territories. HUDCO has cumulatively sanctioned 116 Model Villages / Bastis for total grant assistance of Rs. 38.96 crore upto 31 March 2006.

ACHIEVEMENTS

A) Training : During the period 2005-06, HSMI conducted 59 training programmes which included 30 programmes exclusively for HUDCO Officers and 29 programmes for participants drawn from urban local Governments, other urban sector agencies and institutions within the country and also participants drawn from urban sector institutions from Third World countries including Africa, Latin America, Central Asia / Eastern Europe and Asia-Pacific region. These programmes provided professional exposure to 2141 participants and covered 7281 training mandays.

B) Consultancy : The major activities taken during the year are as under :

1. Bodhgaya Development Plan was finalised.
2. Cultural Complex at Sikkim was started and presently the same is under construction.
3. MPLAD Gujarat works were completed and all the accounts were settled.
4. In order to expand the Consultancy Services, MoU was signed with INTACH and FAIR Good Consultants.
5. Ahmedabad heritage and funding project received new impetus during the year for the development into a good demonstration project.
6. HUDCO participated in 7 Exhibitions and organised HUDCO-Build Tech for brand building activities and dissemination of information.
7. Two competitions were organised – one with Hari Om Ashram Trust on “Valmiki Ambedkar Awas Yojana (VAMBAY) and the other with National Association of Students of Architecture (NASA).

C) Joint Venture : HUDCO was granted Mini Ratna status in 2004-05. During the year 2004-05, one Joint Ventures were approved by HUDCO. Further during 2005-06, two more Joint ventures have been approved. The details of the same are as follows :

1. “Shristi Urban Infrastructure Development Ltd (SUIDL) was JVC formed by HUDCO with the Joint Venture partner namely “Shristi Infrastructure Development Corporation Ltd. (SIDCL)”. The main objectives of the JVC is to promote establish, monitor, collaborate, construct, either through public and / or private participation for housing and infrastructure activities. The JV agreement was executed on 2 June 2005 and the authorised capital of the JVC is Rs 500 lakh with its registered office at New Delhi. The equity share of HUDCO in SUIDL is 40 per cent.
2. “MCM Infrastructure Pvt. Ltd. (MCMI) was JVC of HUDCO with the Joint Venture partner namely “MCM Services Pvt. Ltd. (MCMS)”. The main objectives of the JVC is to promote, establish, monitor, collaborate, construct, either through public and / or private participation mainly in the field of infrastructure development. The JV agreement was executed on 14 December, 2005 and the authorised capital of the JVC is Rs 100 lakh with its registered office at New Delhi. The equity share of HUDCO in MCMI is 26 per cent.

NEW INITIATIVES

During the current financial year, HUDCO has taken initiative in formulating two schemes namely :

1. Construction of kiosks for urban poor
2. Implementation of community toilets and sanitation

CONSTRUCTION OF KIOSKS FOR URBAN POOR

The scheme is to provide loan facility to urban poor living below the poverty line in any urban centres. The scheme provides employment opportunities also to urban poors by providing construction loan facility to enable them to construct kiosks, vending platforms for petty items, etc. The main emphasis of this scheme is to encourage disabled and female members of the urban poor families to run kiosks so that income of the family can be supplemented. Loan upto a maximum of Rs 34,000 or 95 per cent of the cost, whichever is lower, for each kiosk can be availed from HUDCO. The contribution of the urban poor family equivalent to 5 per cent of the cost can also be in the form of labour input of such families.

IMPLEMENTATION OF COMMUNITY TOILETS AND SANITATION

The programme is for funding of construction of Community Toilets and Sanitation facilities for the benefit of floating population and the public in general. The scheme is for construction of community toilets in Schools / Institutes / Hospitals / busy market places / Bus Stands / Railway Stations / slums, etc. The scheme was launched on 30 January 2006 at Jhajjar, Haryana. So far 3 scheme proposals have been sanctioned for HUDCO grant of Rs 47.2 lakh with loan in 2 schemes for Rs 35 lakh has been sanctioned.

INTEGRATED LOW COST SANITATION SCHEME

The Centrally sponsored scheme for Urban Low Cost Sanitation was initiated in 1981 by the Ministry of Home Affairs and later implemented through the Ministry of Social Justice and Empowerment. From 1989-90, it came to be operated through the Ministry of Urban Development and Poverty Alleviation (now being implemented by Ministry of Housing and Urban Poverty Alleviation). The scheme is a demand driven in nature and hence no state allocation / targets can be fixed. The scheme envisages conversion of dry latrines into low cost twin pit sanitary latrines and construction of new individual toilets where none exists. The scheme has been taken up on a 'whole town basis' and is being operated through the Housing and Urban Development Corporation (HUDCO) by providing a mix of subsidy from the Central Government and loan from the HUDCO.

Category	Subsidy	Loan	Beneficiary contribution
EWS	45%	50%	5%
LIG	25%	60%	15%
MIG / HIG	Nil	75%	25%

Cumulative Achievement of the scheme (As on 31 March 2007)

No. of units sanctioned for conversion / construction	:	56.56 lakh
Total construction / conversions completed	:	21.87 lakh
Total construction / conversions in progress	:	1.31 lakh
No. of scavengers liberated	:	52829
No. of Towns declared Scavengers free	:	654

NATIONAL SCHEME OF LIBERATION AND REHABILITATION OF SCAVENGERS AND THEIR DEPENDENTS

Commencement of the Scheme

- In operation since 1991-92 and transferred to the then Department of Urban Employment and Poverty Alleviation (now M / o Housing and Urban Poverty Alleviation) in 2003-04 from the Ministry of Social Justice and Empowerment.

Salient Features of the Scheme

- The Scheme provides both for training and rehabilitation. For training, stipend upto Rs. 500 per trainee per month upto six months in the age group of 15 to 50 years is provided.
- Rehabilitation of scavengers is attempted through sanction of projects costing up to Rs 50,000 for each beneficiary comprising 50 subsidy subject to a ceiling of Rs 10,000 per project, Balance 50 per cent (MM Loan=15 per cent, Bank / NSKFDC Loan=35 per cent).

Implementation & Release of Funds

- Through State Scheduled Castes Development Corporation (SCDCs) and where such Corporation have not been set up, the scheme is implemented by State Governments.
- The scheme is demand driven in nature and hence no State allocation / targets can be fixed.
- The Central assistance is released on the demand from States / SCDCs scheme subject to the submission of utilisation certificates (UCs) from them for the amount released in earlier years.

National Action Plan

- The Planning Commission has prepared a 'National Action Plan for Total Eradication of Manual Scavengers by 2007'. For effective implementation and monitoring of the National Action Plan, a Central Monitoring Committee under the chairmanship of Secretary, M / o SJ&E has also been constituted.

Present Status

Presently the NSLRS is with the Ministry of Housing and Urban Poverty Alleviation. However, Ministry of Social Justice and Empowerment is formulating a new Centrally sponsored scheme "Self Employment Scheme for Rehabilitation of Manual Scavengers" which may replace NSLRS.

Cumulative Achievement of the scheme as on 31 March 2006

- Assistance provided for Training : 1,72,681 Scavengers**
- Assistance provided for Rehabilitation : 4,48,388 Scavengers**
- Total Central assistance released : Rs 747.11 crore**

** Since the inception of the Scheme and upto 2004-05.

NATIONAL SLUM DEVELOPMENT PROGRAMME

The National Slum Development Programme (NSDP) was launched in August 1996. Under National Slum Development Programme, Additional Central Assistance (ACA) was being released to the States / UTs for the development of urban slums. The objective of this programme was upgradation of urban slums by providing physical amenities like water supply, storm water drains, community bath, widening and paving of

existing lanes, sewers, community latrines, street lights, etc. Besides, the funds under NSDP could be used for provision of community infrastructure and social amenities like pre-school education, non-formal education adult education, maternity, child health and primary health care including immunisation, etc. The programme also had a component of shelter upgradation or construction of new houses.

Under the programme, funds in the form of Additional Central Assistance (ACA) were allocated by the Planning Commission annually on the basis of slum population of the State / UT. While the Ministry of Finance released the funds to the States under this Programme, the Ministry of Home Affairs released the funds to Union Territories. The States released the funds to the Implementing Agencies as per their requirements. The Ministry of Housing and Urban Poverty Alleviation had been nominated as the Nodal Ministry to monitor the progress of the programme in respect of States.

The scheme has been discontinued from 1 April 2005. As reported by the States / UTs, since the inception of the programme and upto 31 March 2006 out of the total funds of Rs.3089.63 crore released by the Central Government, an amount of Rs. 2379.01 crore has been spent and about 4.58 crore of slum dwellers have benefited from this programme

Urban Reforms Incentive Fund: The Government is keen to have reforms in the urban sector. In his Budget Speech of 2002-03, the then finance Minister announced creation of an Urban Reforms Incentive Fund with an initial allocation of Rs. 500 crore to provide urban reform linked assistance to State / Union Territories. The detailed guidelines of the scheme were approved by Government on 28 June 2003. In the first phase, seven reforms e.g. Repeal of Urban Land Ceiling and Regulation Act, Rationalisation of Stamp Duty, Reforms of Rent Laws, etc., were identified. The first phase is being implemented with an annual allocation of Rs. 500 crore. Till 31 March 2005, 25 States and three Union Territories signed Memoranda of Agreement with the Central Government to carry out reforms. This scheme is now proposed to be merged with National Urban Renewal Mission from 2005-06.

Two Million Housing Programme : The Two Million Housing Programme was launched by the Government in the year 1998-99 with the objective of providing 'housing for all' with emphasis on weaker section and the low income groups. As a part of the Two Million Housing Programme HUDCO was assigned a target of 10 lakh units annually (six lakh units in rural areas and four lakh units in urban areas). Against the same since 1998-1999 to 2005-2006, HUDCO supported a total of 72.71 lakh units in both rural and urban areas.

Under the Programme "Housing for all" construction of Two Million Houses are to be made every year in addition to the normal housing programme. Out of this, seven lakh are to be constructed in urban area and 13 lakh in rural area with emphasis on the economically weaker section and low income groups. The scheme was launched in 1998-1999. In the urban area as against the target of 56 lakh dwelling units in eight year (1998-99 to 2005-06), a total of 69.64 lakh dwelling units were sanctioned by various agencies viz., Housing and Urban Development Corporation Ltd. (HUDCO), Cooperative Sector (1998-99 to 2004-05); Housing Finance Institutions; and Public Sector Banks with Rs. 136771.09 crore investment. In rural areas, HUDCO finance 41.81 lakh dwelling units with sanctioned outlay of Rs. 5841.92 crore (so far) against the target of 48 lakh dwelling units.

BUILDING MATERIALS AND TECHNICAL PROMOTION COUNCIL

Building materials account for 65 to 75 per cent of the total cost of construction. The

demand for building materials is continuously rising with the increasing need for housing both in rural and urban areas.

The building materials sector is shifting from highly decentralised and labour-intensive methods and processes to centralised, machine-dependent industrial mode of production. Ruthless and extensive use of energy intensive conventional building materials such as steel, cement, glass, aluminium, plastics, bricks, is draining the energy resources and adversely affecting the environment. Further, centralised mode of production for these building materials require hauling of natural resource materials and necessitates the expenditure on fossil fuel to cover great distances, for making availability of finished material and overall contribute to cost of materials, increased energy requirements and adverse impact on environment.

A lot of solid wastes are generated from industries and thermal power plants such as red-mud, coal ash, slag, fly ash, etc, in bulk quantities and unutilised for several decades, are required to be put in use to meet the future demand for sustaining the building and construction activities in longer run. In the era of globalisation, need for building materials is bound to grow at an alarming rate in coming years and manufacturing of building materials like bricks / blocks, cement, steel, aggregates, etc., consumed in bulk quantities has started putting great pressure on natural resources (raw materials) and energy requirements. Optimum utlisation of available energy resources and raw materials to produce simple, energy efficient building materials, adoption of only energy efficient traditional materials and construction methods besides innovative sustainable materials are needed to bridge the gap in demand and supply of building materials. The Government is encouraging use of innovative, cost-effective, energy efficient and green technologies in housing and other building construction.

In this context, the following initiatives are taken

a. Action plan for propagation of new technologies in housing sector is drawn up;

b. The Building Materials and Technology Promotion Council (BMTPC) is functioning as a registered society under the aegis of Ministry of Housing and Urban Poverty Alleviation, Government of India, to provide an appropriate platform for technology identification, validation, transfer, application in the shelter sector and promoting large-scale of commercial production of innovative, energy efficient, environment-friendly green building materials. The Council has taken a lot of initiatives in development and promoting cost-effective environment friendly building materials based on utilisation of agro-industrial wastes, introduction of new specifications in the schedule of rates by CPWD, formulation of national standards by Bureau of Indian Standards and increasing the entrepreneurs interface with financial institutions and research agencies. A number of fly ash based building material production units in various parts of the country have been set up. A large number of door manufacturers are using imported DWF plates which act as wood substitute because plantation timber is used for manufacture of these doors;

c. In order to increase the productivity and quality of building components, different type of easy to operate machines have been developed by BMTPC.

d. BMTPC is operating Performance Appraisal Certification Scheme for new building materials and technologies on which national standards are not available for bringing in the required level of confidence among prospective

users. The scheme aims to provide the user means for informed choice of new innovative materials through well defined process of appraisal. It generates necessary data for formulation of national standard by the Bureau of Indian Standards

e. Some of technologies and new materials and components already tested and manufactured on a pilot scale are identified for large-scale extension while some have been given license for commercial productions such as Bamboo Mat Corrugated Roofing Sheets, Fly Ash / Red Mud Polymer Door Shutters, Coir Polymer Composites, Bagasse Board, etc.

f. A network of Building Centres was setup as a Centrally-sponsored scheme through HUDCO to train artisans and others for transfer of appropriate technology to rural and urban areas. As on 31 March 2006, administrative approval has been given for 655 Building Centres. Total grant of Rs 2945.69 lakh has been sanctioned. These Building Centres have trained 306677 artisans in various cost-effective technologies, executed worth Rs 134406.29 lakh and manufactured product of Rs. 35373.87 lakh. These Centres are doing good work in propagation and promotion of innovative cost-effective building materials and technologies. This Scheme has however been discontinued from 1 April 2002. Some of these Centres have been provided KFW grants for purchase of machinery / equipment;

g. Non-Governmental Organisations are increasingly being supported to supplement governmental efforts.

h. BMTPC is now engaged in exporting innovative technologies and machineries developed in India, to African and Latin American Countries

SWARNA JAYANTI SHAHARI ROZGAR YOJANA

All the three Urban Poverty Alleviation schemes, namely, Urban Basic Services for the Poor (UBSP), Nehru Rozgar Yojana (NRY) and Prime Minister's Integrated Urban Poverty Eradication Programme (PMI-UPEP) stand subsumed in a new scheme Swarna Jayanti Shahari Rozgar Yojana (SJSRY) from 1 December 1997. The SJSRY seeks to provide gainful employment to the urban unemployed or under-employed through encouraging the setting up of self-employed ventures or provision of wage employment. This programme relies on creation of suitable community structures. The Centre and the States fund the Yojana on a 75:25 basis. The scheme consists of two special programmes: (a) the Urban Self-Employment Programme (USEP), and (b) the Urban Wage Employment Programme (UWEP).

During 2006-07, Rs. 248.68 crore were released under SJSRY to States / UTs under SJSRY.

(a) Urban Self-Employment Programme : This Programme has three components: (i) Assistance to individual urban poor beneficiaries for setting up gainful self-employment ventures; (ii) Assistance to groups of urban poor women for setting up gainful self-employment ventures. This sub-scheme is titled as "The Scheme for Development of Women and Children in the Urban Areas (DWCUA)"; and (iii) Training of beneficiaries, potential beneficiaries and other persons associated with the urban employment programme for upgradation and acquisition of vocational and entrepreneurial skills. The programme is applicable to all urban towns in India and implemented on a whole-town basis with special emphasis on urban poor clusters. The programme targets the urban poor, defined as those living blow the urban poverty-line. The percentage of women beneficiaries under this programme shall not be less than 30 per cent. The SCs and STs must be benefited in proportion to

their strength in local population. A provision of three per cent shall be reserved for the disabled under this programme. There is no minimum educational qualification for beneficiaries under this programme. However, this scheme is not applied to beneficiaries educated beyond the ninth standard. Women beneficiaries belonging to women headed households, viz, widows, divorcees, single women, or household where women are the sole earners, are ranked higher in priority. Up to 31 March 2007, the number of persons assisted to set up micro enterprises under USEP was 6,93,365 and women beneficiary under DWCUA groups was 1,98,314 thus benefiting 8,91,679 persons to set up self-employment ventures. The number of persons provided various skill training under the training component of USEP was 9,34,649 till 31 March 2007.

Development of Women and Children in Urban Areas (DWCUA) programme aims at helping groups of urban poor women in taking up self-employment ventures. The group may consist of at least 10 women. The ceiling of subsidy under the scheme is Rs.1.25 lakh or 50 per cent of the cost of the project whichever is less. Where the group sets itself up as Thrift and Credit Society, in addition to its self-employment venture, it will be eligible for an additional grant of Rs.25,000 as revolving fund at the rate of Rs.1,000 maximum per member. The fund is meant for purposes like purchase of raw materials and marketing, infrastructure support, one-time expense on child care activity, expenses up to Rs.500 on travel cost of group members to bank payment of insurance premium for self / spouse / child by maintaining saving for different period by a member and any other expense allowed by the State in group's interest. The revolving fund can be availed by a group only after one year of its formation. Up to 31 March 2007, 52,701 DWCUA groups were formed.

(b) Urban Wage Employment Programme : This programme seeks to provide wage employment to beneficiaries living below the poverty-line within the jurisdiction of urban local bodies by utilising their labour for constructing of socially and economically useful public assets. There are no restrictions on educational qualification. The programme applies to urban local bodies, having a population of less than five lakh as per the 1991 census. The material / labour ratio for works under this programme is to be maintained at 60:40. The prevailing minimum wage rate, as notified from time to time for each area, has to be paid to beneficiaries under this programme. The programme is dovetailed with the state sector Environmental Improvement of Urban Slums (EIUS) scheme as well as the National Slum Development Programme (NSDP). This programme is not designed to either replace or substitute the EIUS, the NSDP, or any other state sector scheme. The number of man-days of work generated upto 31 March 2007 is 583.06 lakh.

VALMIKI AMBEDKAR AWAS YOJANA

The Valmiki Ambedkar Awas Yojana (VAMBAY) was launched on 2 December 2001 to ameliorate the conditions of the urban slum dwellers living below poverty line who do not possess adequate shelter. The primary objective of VAMBAY is to facilitate construction and up-gradation of dwelling units for the slum dwellers and providing a healthy and enabling urban environment through community toilets. Since its inception GOI subsidy of Rs. 932.56 crore has been released for construction of 4,59,728 dwelling units and 65,580 toilet seats.

The GoI subsidy for construction of toilet seats was released under 'Nirmal Bharat Abhiyan', a sub-component of VAMBAY. Under this programme, the sanitation units, with a 10 seat or a 20 seat toilet block meant for men, women and children with separate compartments for each group and special design features, are maintained with the help of contribution from those who uses them.

VAMBAY was the first scheme of its kind meant exclusively for slum dwellers with a Government of India subsidy of 50 per cent, the balance 50 per cent arranged by the State Government. VAMBAY, along with National Slum Development Programme (NSDP), has been subsumed in Integrated Housing and Slum Development Programme launched on 3 December 2005 along with Jawaharlal Nehru National Urban Renewal Mission (JNNURM).

NORTH EAST INITIATIVES

The Government set up a Non-Lapsable Central Pool of Resource (NLCPR) for the North-Eastern region including Sikkim.

During the year 2002-03, projects amounting to Rs.86.58 crore were sanctioned and fund to the tune of Rs.43.29 crore were released to NBCC, which is the executing agency for these Projects. In addition to this two Projects in Tripura and Mizoram respectively, at a total cost of Rs.175.23 lakh were sanctioned and out of this Rs. 87.62 lakh were released to BMTPC, during the year 2002-03.

During the year 2003-04, a new project amounting Rs.207.34 lakh was sanctioned for the Manipur State and under this Rs.103.67 lakh were released to NBCC, which is the executing agency. However, the second installment of funds for the projects sanctioned in the earlier years, amounting Rs.49.9633 crore were also released to NBCC during 2003-04. During the year 2004-05 Rs. 82 crore were released to executing agencies like NBCC, BMTPC and HPL. During the year 2005-06, Rs. 45.06 crore was released for taking up developmental schemes in the urban sector of the North Eastern States including Sikkim.

A provision of Rs. 50 crore has been made in the current financial year of 2006-07 for taking up developmental schemes in the urban sector of the North Eastern States including Sikkim.

BASIC SERVICES TO THE URBAN POOR

For integrated development of slums through projects for providing shelter, basic services and other civic amenities with a view to provide utilities to the urban poor in select 63 cities a Sub-Mission on Basic Services to the Urban Poor (BSUP) has been launched on 3 December 2005 by the Hon'ble Prime Minister. The Sub-Mission on BSUP is implemented on a demand-driven basis for which State Governments are required to prepare and submit City Development Plans (CDPs); Detailed Project Reports (DPRs) and also to sign Memorandum of Agreement (MoA) making a commitment to undertake urban reforms. Salient features of BSUP are as follows:-

- The Sub-Mission is to be implemented in 63 select JNNRUM cities.
- To be implemented over 7 years beginning with the year 2005-06.
- Central share in the form of Additional Central Assistance as full grant
- 50 per cent of the project cost in respect of cities having million plus population or above to be borne by the Central Government
- 90 per cent of the project cost borne by the Central Government for projects from cities / towns in North Eastern States and Jammu & Kashmir.
- 80 per cent of the project cost borne by the Central Government for projects from the remaining cities
- A minimum of 12 per cent beneficiary contribution for houses. For SC / ST / BC / OBC / PH and other weaker sections, 10 per cent beneficiary contribution
- Access of Central assistance predicated upon the State / Urban Local Bodies / Parastatals agreeing to the reforms.

- Reforms to ensure improvement in urban governance.

Since the launch of BSUP, an amount of Rs.87.33 crore has been released as on 31 May 2006.

INTEGRATED HOUSING AND SLUM DEVELOPMENT PROGRAMME

In cities / towns not covered under BSUP, an Integrated Housing and Slum Development Programme is implemented. The IHSDP has subsumed Valmiki Ambedkar Awas Yojana (VAMBAY) and National Slum Development Programme (NSDP). For IHSDP, CDPs are not required. Salient features of IHSDP are as follows:-

- Central share in the form of Additional Central Assistance as full grant
- 80 per cent of the project cost borne by the Central Government
- 90 per cent of the project cost borne by the Central Government for projects from cities / towns in special category States
- A minimum of 12 per cent beneficiary contribution for houses. For SC / ST / BC / OBC / PH and other weaker sections, 10 per cent beneficiary contribution
- Access of Central assistance predicated upon the State / Urban Local Bodies / Parastatals agreeing to the reforms.
- Reforms to ensure improvement in urban Governance.
- Cities / towns to prepare and submit Detailed Project Reports.

NATIONAL POLICY ON URBAN STREET VENDORS

Street Vendors constitute an integral part of our urban economy. They provide essential services to consumers, create their own self-employment and at the same time contribute to the economic growth of the city. Despite these, street vendors have not yet been recognised as part of the system. They are not included in the town plans and the municipal policies. Therefore, they remain insecure leading to increase in poverty and unemployment. Law and order problems also increase leading to inequalities and disharmony in the cities.

To address the situation, this Ministry has formulated a National Policy on Urban Street Vendors on the basis of the recommendation of the Task Force constituted for this purpose and ultimately approval from the Central Government on 20 January 2004. The State Governments were requested for its suitable and appropriate adoption in overall interest of Urban Street Vendors, with or without any change, to suit local conditions and also respecting any court decisions, which may impinge on the issue.

A one-day National Workshop on street vendors for effective implementation of the National Policy was organised on 19 October 2005 at New Delhi with a view to remove the hurdles that come in the way of implementation of the policy. The workshop was attended by senior officials of the State Governments including Commissioners of some of the selected cities, representatives of NGOs and other stakeholders from various Central Government Ministries / Departments. Based on the various suggestions received and viewpoints put forward by participants, States / UTs have been requested to take a follow-up action on the action points, which were formulated and announced at the end of the workshop and have been asked to furnish the action taken / status through regular reports to take a comprehensive look at the actual implementation of the National Policy on Street Vendors by the various States / UTs.

17 India and the World

THERE has been a healthy tradition of national consensus in the conduct of India's Foreign Policy. In a period of rapid and continuing change, foreign policy must be capable of responding optimally to new challenges and opportunities. It has to be an integral part of the larger effort of building the nation's capabilities through economic development, strengthening the social fabric and well being of the people and protecting India's sovereignty and territorial integrity. India's foreign policy is a forward-looking engagement with the rest of the world, based on a rigorous, realistic and contemporary assessment of the bilateral, regional and global geopolitical and economic milieu.

In the backdrop of the changing international scenario, India's foreign policy is directed towards the realisation of the following objectives: (i) to protect India's core national interests and concerns in a rapidly changing international environment by fostering support and understanding in the international community; (ii) to preserve the autonomy of the decision making process and to play a pioneering role in the establishment of a stable, prosperous and secure global order; (iii) to strengthen the international campaign against terrorism which is a global threat; (iv) to build an international environment which is supportive of India's rapid economic growth including higher investments, trade, access to technology and strengthening India's energy security; (v) to work closely with P-5 countries and to build strategic ties with the major powers such as the USA, the EU, Japan, Russia, China; (vi) to intensify and strengthen ties with neighbours through mutually beneficial cooperation and by building a climate of confidence and trust along with the acknowledgment of each other's legitimate concerns; (vii) realisation of SAARC as an economically integrated region at peace with itself and engaged with the world; (vii) to ensure that cross-border terrorism is brought to an end and the entire infrastructure of terrorism operating from Pakistan is dismantled; (viii) to further the gains from India's 'Look East' Policy and aspire for substantive progress in several areas of common interest to India and ASEAN; (ix) to strengthen India's ties with the countries of the Gulf region that has become home to over 4 million Indians and is a major source of supplies of oil and gas; (x) to leverage economic growth through support to the activities of regional organisations like the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Making-Ganga Cooperation and trans-regional groupings like the India, Brazil and South Africa (IBSA) Initiative and the Indian Ocean Rim Association for Regional Cooperation (IOR-ARC); (xi) to continue to work closely with international organisations like the UN, NAM, the Commonwealth and regional groupings like the EU and G-20 for furthering India's interests in the international arena; (xii) to reform and restructure the UN Security Council and espouse multipolarity in a world order that respects the principles of sovereignty and non-intervention; (xiii) to promote a more equitable equation between the developed and the developing world in the political, economic and technological domains; (xiv) to work towards the goal of global nuclear disarmament within a time bound framework; (xv) to closely interact with the Indian Diaspore on a continuing basis in order to strengthen their bonds with India and to recognise their pivotal role in India's international relations.

In pursuit of the above objectives, India has undertaken a comprehensive engagement with the world with all major powers, with our extended neighbourhood and without partners in the developing world and the Non-Aligned Movement. The year saw several bilateral and multilateral exchanges that took place at the highest levels between India and the rest of the world.

NEIGHBOURS

Bhutan and India share extensive and mutually beneficial relationship. There is free movement of goods between the two countries and Indian rupee is legal tender in Bhutan. Ninety per cent of Bhutan's global trade is with India. India has played a pivotal role in the social and economic development of Bhutan. India has continued to be the largest trade and development partner of Bhutan. India's bilateral cooperation with Bhutan spans several sectors such as hydropower, health, education, human resource development, IT and building of infrastructure. India and Bhutan signed an Agreement on cooperation in the field of Hydroelectric Power in July 2006. The 1020 MW Tala Hydro Electric Project constructed with the Indian assistance commenced commercial operation from 31st July 2006 and is a shining example of mutually beneficial cooperation between India and Bhutan. His Majesty the King of Bhutan, Jigme Khesar Namgyel Wangchuk paid his first visit abroad as the fifth Druk Gyalpo to India from 7-12 February 2007. During his visit, the India-Bhutan Friendship Treaty was signed between the fifth Druk Gyalpo and External affairs Minister, Pranab Mukherjee on 8 February 2007. This marked a new stage in the further intensification of relations between India and Bhutan.

India and Nepal share extensive bilateral relations. An open border of 1860 kilometers between the two countries facilitates free movement of goods and people. Indian Rupee is a legal tender in Nepal. Over 62 per cent of Nepal's global trade is with India, and nearly half of the foreign direct investment originates from India. India has undertaken several projects in health, education, community development and infrastructure sector under the Small Development Project Scheme. India-Nepal share extensive bilateral relations. An open border of 1860 kilometers between the two countries facilitates free movement of goods and people. Indian Rupee is a legal tender in Nepal. Over 62 per cent of Nepal's global trade is with India, and nearly half of the foreign direct investment originates from India. India has contributed to the development efforts of the Government of Nepal by undertaking several development projects in the area of health, education, training, rural and community development and infrastructure sector. The India-Nepal Treaty of Transit was renewed in April 2006 for a period of seven years. Two big projects viz. Bir Hospital Expansion costing Rs. 65 crores and Manmohan Adhikari Polytechnic at the cost of Rs. 20 crores are under implementation. The Government of India laid particular emphasis on the improvement of border infrastructure as well as initiating work on other infrastructure projects in Nepal in consultation with the Government of Nepal.

The year 2006 witnessed momentous changes in Nepal. After the restoration of multi-party democracy in April 2006, the people of Nepal made significant progress in finding a peaceful solution to the challenges facing the country. India's approach was to support efforts which would restore political stability in the country and place Nepal on the path of economic recovery. India took the consistent stand that there was no military solution to the problems facing Nepal and it was essential to find a peaceful political solution based on the principal of multi-party democracy. We extended our support towards this objective, and for the aspirations of the people

of Nepal. India's policy has been deeply appreciated in Nepal as well as by the international community.

India-Sri Lanka relations have undergone a qualitative and quantitative transformation in the recent past. There is a general, broad-based improvement across all sectors of bilateral cooperation. There exists a broad consensus within the Sri Lankan polity on the primacy of India in Sri Lanka's foreign policy which is evident through frequent contacts at the highest political level. President Mahinda Rajapakse visited India from 25-29 November 2006 and held discussions with the Prime Minister, Chairperson UPA, Leader of Opposition, External Affairs Minister and other senior political leaders and officials. Negotiations continued on a Comprehensive Economic Partnership Agreement (CEPA), which will widen and deepen the existing Free Trade Agreement (FTA), by including trade and services and investments. India became the 2nd largest overall investor in Sri Lanka. The major Indian investors include Indian Oil Corporation, ICICI, SBI, TATA, CEAT, Nichsles Piramal and VSNL. India has extended a number of credit lines to Sri Lanka in the past. The US$ 31 million credit line for supply of wheat and buses and the US$ 150 million credit line for purchase of petroleum products were fully utilized, Since the entry of Free Trade Agreement (FTA) in March 2000, bilateral trade has grown rapidly. India is the largest trade partner of Sri Lanka with 14% share of its total trade. In 2006, bilateral trade amounted to US$ 2.3 billion. India continued to play a role in developing infrastructure in Sri Lanka. India remains committed in its support towards the unity, sovereignty and territorial integrity of Sri Lanka and to the restoration of lasting peace through a peaceful, negotiated settlement that meets the just aspirations of all elements of the Sri Lankan society.

India and Bangladesh enjoy extensive and wide-ranging relations covering a number of areas of mutual interest. The people of the two countries have enjoyed traditionally close geographical, historical, cultural and ethnic ties. H.E. Begum Khaleda Zia, Prime Minister of Bangladesh paid a state visit to India from 20-22 March 2006 at the invitation of the Indian Prime Minister. During the visit, the Bangladesh Prime Minister held comprehensive discussions with the Indian Prime Minister on the entire gamut of bilateral relations and other regional and international issues of mutual interest. Both sides agreed that meetings of bilateral institutional mechanisms would be held more frequently and that their outcome would be monitored by the political leadership on a continuous basis. During the visit, two agreements were signed. While the Revised Trade Agreement is expected to provide a framework for expansion of bilateral trade, the Agreement on Mutual Cooperation for Preventing Illicit Trafficking in Narcotic Drugs, Psychotropic Substances and Related Matters signals the joint determination of the two governments to combat drug trafficking. In keeping with Government's commitment to enhance people to people contacts, India issued nearly 500,000 visas to Bangladesh nationals, enabling them to undertake visits to India for purposes of pilgrimage, medical treatment, tourism, education, etc. A large number of scholarships were given to Bangladesh students under ICCR, the Colombo Plan and the bilateral ITEC scheme.

Myanmar : India's policy of constructive engagement with Myanmar continued during 2006-07. Dr. A.P.J. Abdul Kalam visited Myanmar in March 2006. It was the first visit by an Indian President to Myanmar and first Head of State / Head of Government level visit from India to Myanmar after Prime Minister Rajiv Gandhi's visit in 1987. The President had delegation-level discussion and also tete-a-tete with Senior General Than Shwe.

Heads of State of the two countries witnessed the signing of (i) Framework Agreement for Mutual Cooperation in the field of Remote Sensing (ii) Memorandum of Understanding on Cooperation in the Petroleum sector between Ministry of Petroleum and Natural Gas of India and Ministry of Energy of Myanmar (iii) Memorandum of Understanding on Cooperation in Buddhist Studies between the Indian Council for Cultural Relations (ICCR) and Ministry of Religious Affairs of Myanmar. President also visited Mandalay. External Affairs Minister, Pranab Mukherjee visited Myanmar in January 2007, Work continued on cross border infrastructure projects, including the resurfacing of the Tamu-Kalewa-Kalemyo Road and the Kaladan Multi-Modal Transit Transport Project which would benefit Myanmar and the North East region of India as well as improving bilateral trade.

India's relations with **Maldives** have continued to be cordial and friendly; high level exchanges and meetings between the two countries have continued. The then Defence Minister Pranab Mukherjee visited Maldives on 15-16 April 2006 to participate in the transfer ceremony of INS Tillanchang, a fast attack craft, to Maldives. From the Maldivian side, Dr. Ahmed Shaheed, Foreign Minister paid an official visit to India from 23-28 October 2006. During his visit, Dr. Shaheed called on the Prime Minister, Defence Minister and leader of Opposition, Lok Sabha. External Affairs Minister, Pranab Mukherjee visited Maldives in January 2007. President Gayoom of Maldives visited India from 27 January-1 February 2007 as the head of the Maldivian delegation to attend the Satyagraha Conference. India continued to provide training facilities to Maldivian nationals in areas such as defence, police, education, etc. under its aid assistance programmes. An MoU was signed between the two countries on 10 July 2006 for setting up the faculties of Hospitality and Tourism studies - a hotel management training institute in Maldives with Indian assistance of Rs. 31 crores approximately.

India continued its proactive policy of constructive engagement to establish peaceful, friendly and cooperative relations with **Pakistan**. Based on the solemn commitment given by the President of Pakistan on 6 January 2004 in Islamabad not to permit any territory under Pakistan's control to be used to support terrorism, the two countries continued their Composite Dialogue which made some progress during the year. The third round of the Composite Dialogue commenced with the meeting of the Foreign Secretaries in January 2006 and concluded in November 2006 when the Foreign Secretaries met again in New Delhi. The third round helped further the engagement between the two countries and resulted in the signing of a Revised Shipping Protocol and the initialing of an Agreement on 'Reducing the Risk from Accidents relating to Nuclear Weapons'. A communication link established earlier between the Coast Guard of India and Pakistan Maritime Security Agency was operationlised. There was satisfaction at the implementation of the Agreement on the Pre Notification for the Flight Testing of Ballistic Missiles. The transport links established in the previous rounds of the Dialogue continued to operate successfully, facilitating the people to people interaction. Another achievement of the dialogue process was the continued commitment to the understanding that the prisoners' issue would be dealt with on a humanitarian basis by notifying the arrests immediately, providing consular access within three months and releasing prisoners as soon as the prison term was over.

Cross-border terrorism continued to affect bilateral relations. The Mumbai blasts of July 2006, which had cross-border linkages, led to the postponement of Foreign

Secretary level talks. Prime Minister Dr. Manmohan Singh and Pakistan President Musharraf in their meeting in Havana on 16 September 2006, on the margins of NAM Summit, decided to institute a Joint anti-terror mechanism and resume the Composite Dialogue. The Joint anti-terror mechanism was set up during foreign Secretary level talks in November 2006.

Promotion of commercial interaction was an important component of India's policy of engagement with Pakistan. The financial year 2006-07 witnessed substantial growth in bilateral trade, from US$ 320 million during April-August of 2005 to US$ 759 million during the same period in 2006, an increase of 137%. Exports from Pakistan registered a rise of 122% though the trade balance remained in favor of India. Pakistan expanded its positive list allowing import of Indian goods from 773 to 1075 items, though the Wagah land border continued to be opened by Pakistan only for a handful of select goods such as onions, tomatoes, potatoes, garlic meat and few others. Pakistan, however, continues with its policy of linking economic and commercial engagement to political issues. Pakistan did not meet its obligations under South Asia Free trade Agreement (SAFTA) when it refused to extend tariff concessions under it to India.

Afghanistan : High-level interactions, the hallmark of India-Afghanistan relations, continued during 2006. President Hamid Karzai paid a State visit to India from 9-13 April 2006 with a large delegation including six Cabinet Ministers and a number of senior officials. Three Memoranda of Understanding (MoU) were signed as part of strengthening the bilateral cooperation which include MoU on Cooperation in the field of Rural Development, MoU on Cooperation in the field of Education, and MoU on Cooperation in the field of Standardization between Bureau of Indian Standards and Afghan National Standardization Authority. Besides, India also agreed to provide a Line of Credit of US$ 50 million to encourage bilateral business-to-business relations. Foreign Minister of Afghanistan Dr. Spanta paid an official visit to India from 29 June-1 July 2006.

President Karzai visited India again from 15-19 November 2006. He, along with Prime Minister Dr. Manmohan Singh, inaugurated the Second Regional Economic Cooperation Conference (RECC) on Afghanistan on 18 November 2006 at New Delhi. President Karzai also attended the concluding session of the parallel Regional Business Conference (RBC) on Afghanistan which was hosted by three apex Indian business chambers namely, Federation of Indian Chambers of Commerce and Industry (FICCI), the Confederation of Indian Industry (CII) and Associated Chamber of Commerce and Industry of India (ASSOCHAM), in association with Afghanistan Investment Support Agency (AISA) on 18 November 2006.

India increased its cumulative pledge of assistance to Afghanistan by US$ 150 million during the year raising it to US$ 750 million. India's assistance projects in Afghanistan are in wide range of sectors, including hydroelectricity, road construction, agriculture, industry, telecommunications, information and broadcasting, education and health. India supported Afghanistan's entry into SAARC. Afghanistan became a member of SAARC during 14th SAARC Summit held in New Delhi in April 2007.

China : The year 2006 was celebrated as the India-China Friendship Year with a number of commemorative activities. The State visit by President Hu Jintao of China from 20-23 November 2006 was the highlight of the year. The Joint Declaration issued during the visit spelt out a ten pronged strategy to upgrade India-China relations to a qualitatively new level and to further substantiate and reinforce the strategic and

cooperative partnership between the two countries. Thirteen agreements / MoUs were signed during the visit.

Comprehensive economic engagement was a major thrust area with both sides deciding to fix a trade target of US$ 40 billion by 2010 and mandating the Joint Task Force studying the feasibility and benefits of an India-China Regional Trading Arrangement to complete its work by October 2007. The signing of the Bilateral Investment Protection and Promotion Agreement would encourage and facilitate bilateral investment flows. It was also agreed to enhance trans-border connectivity and cooperation through expansion of border trade by strengthening of existing routes and exploring additional routes. Border trade through Nathula was resumed during the year.

Beside the visit of President Hu Jintao, the year witnessed a number of high-level interactions between India and China. Chinese Minister of Commerce, Bo Xilai visited India on 15-16 March 2006 for the 7th meeting of India-China Joint Economic Group and the Chinese Finance Minister, Jin Renquing visited India from 3-6 May 2006 to attend the annual meeting of the Asian Development Bank. The then Defence Minister, Pranab Mukherjee paid a bilateral visit to China from 28 May-2 June 2006 to attend the SCO summit and subsequently from 13-18 December 2006 for the first five countries Energy Ministers' Round-table Conference. Speaker of Lok Sabha, Somnath Chatterjee led an Indian parliamentary delegation to China from 3-8 July 2006. Ministry for Science and Technology & Earth Sciences, Kapil Sibal paid a bilateral visit to China from 6-12 September 2006. Minister for Tourism and Culture, Ambika Soni visited China from 24-26 December 2006.

As part of the continued dialogue at the highest level, Prime Minister Dr. Manmohan Singh and Chinese Prime Minister Wen Jiabao met on 14 January 2007 in Cebu on the sidelines of the ASEAN meeting.

The growth of bilateral economic and commercial ties in recent years has been one of the most visible indicators of the developments in India-China relations. The pace of growth of bilateral trade was maintained during the year. Bilateral trade has grown significantly and crossed US$ 25 billion in 2006 (a target of US$ 40 billion has been set for 2010). As per Chinese statistics, till September 2006, total contracted Indian investments in China reached US$ 406 million while Chinese investment in India reached US$48 million. Similarly, the value of Chinese project contracting in India was : (i) total contract value (projects signed / under implementation) : US$ 6.9 billion, (ii) the value of projects already completed US$ 1.4 billion.

EAST ASIA

Japan : India values its close, friendly and cooperative relations with Japan. The relations have been upgraded to Global and Strategic Partnership during the visit of Prime Minister Dr. Manmohan Singh to Japan from 13-16 December 2006. During the visit a Joint Statement was signed to upgrade our relations to a Strategic and Global Partnership, initiate a series of measures for comprehensive economic engagement, including the launch of negotiations for Comprehensive Economic Partnership Agreement, enhance S&T cooperation, set up consultation mechanism to facilitate high-technology trade and foster closer people-to-people linkages. The two countries agreed on Special Economic partnership Initiative, which has Dedicated Freight Corridor and Delhi-Mumbai Industrial Corridor as its main elements. The year 2006 saw a substantial increase in the number of high-level exchanges. Finance Minister P. Chindambaram visited Japan from 17-20 January 2006. Finance Minister of Japan

Sadakazu Tanigaki visited India from 3-6 May 2006 to attend the 39th Annual General Meeting of ADB in Hyderabad and had a meeting with his Indian counter part. The then Defence Minister Pranab Mukherjee visited Japan from 25-28 May 2006. Minister of Commerce and Industry, Kamal Nath visited Japan on 14-17 June 2006 to attend India-Japan Business Summit, World Economic Forum and East Asia Summit. Minister of Power Sushil Kumar Shinde visited Japan on 21-28 June 2006. The Minister for Foreign Kumar Shinde visited Japan on 21-28 June 2006. The Minister for Foreign Affairs of Japan Taro Aso paid an official visit to India on 3-4 January 2006. Yasuhisa Shiozaki, then Senior Vice Minister for Foreign Affairs and presently Chief Cabinet Secretary visited India on 25-28 July 2006. Japanese Minister of Land, Infrastructure and Transport Kazuo Kitagawa visited India from 25-27 July 2006. Japan is the third largest investor in India with a total investment estimated at about US$ 2.12 billion till March 2006.

ROK : India-Republic of Korea (ROK) relations have acquired positive momentum and have diversified in recent times. President, Dr. A.P.J. Abdul Kalam visited ROK from 6-9 February 2006 at the invitation of ROK President. This was the first ever visit of an Indian President to the ROK. Four agreements were signed during the visit, viz. Cooperation and Mutual Assistance in Customs Matters, Cooperation in the fields of Science and Technology, Joint Ministerial Statement on the launching of a Joint Task Force to develop a Comprehensive Economic Partnership Agreement; and a Memorandum of Understand between Department of Science and Technology of the Government of India and The Korea Industrial Technology Foundation.

During the year the two sides continued to work together to substantiate the Long-Term Cooperative Partnership for Peace and Prosperity, including diversification of trade and investment linkages, enhanced momentum in defence relations and increased people-to-people contacts. ROK continued to be an important economic partner, with the trade volume increasing by 35% to touch US$ 12 billion in an Integrated Steal Project in Orissa. To give a new thrust to economic cooperation, India and ROK are negotiating a Comprehensive Economic Partnership Agreement.

DPRK : The relations between India and DPRK continued to be cordial with a focus on humanitarian and human resource development assistance. A two-member Foreign Ministry delegation led by Director of 4th Department in the Ministry of Foreign Affairs Ma Chol Su visited India during 15-18 March 2006 to hold bilateral discussions on issues of mutual interest. A DPRK information delegation headed by the Vice-Chairman of the DPRK Information Committee visited India during 25-29 April 2006. An agreement on cooperation in the field of information between the two governments was signed on 26 April 2006.

Mongolia : India-Mongolia relations have been steadily strengthened following the decision to elevate it to a ‘‘new level of Partnership’’ reached during the visit of Prime Minister Enkhbayar to India in 2004. India continued to provide technical and economic cooperation to Mongolia in higher education, agriculture, information and communication technology and human resource development. Chief Minister of Delhi Sheila Dikshit visited Mongolia from 10-13 July 2006 onthe occasion of Mongolian National Day. Minister of State for Defence M.M. Raju paid an official visit to Mongolia from 3-6 May 2006.

SOUTH-EAST ASIA AND THE PACIFIC

India’s relations with countries in the South East Asia and South Pacific, including

Australia and New Zeland, continued to improve. Building on its historical and cultural linkages, India continued to pursue closer relations with South East Asia as envisioned in its 'Look East Policy'. This policy has been extended beyond South East Asia to the Pacific region. India's ''Look East'' policy has manifested itself in its Dialogue Partnership with the ASEAN, membership of the BIMSTEC, MGC, ARF and the East Asia Summit, progressive economic integration with countries of the region and the search for closer defence and security cooperation, both bilaterally and through multilateral frameworks.

Regular exchange of high level visits at bilateral level and interactions at regional and multilateral fora have contributed to a higher degree of comfort and familiarity among the leaders which in turn helped in imparting fresh dynamism to our relations with these countries. The Prime Minister participated in the India-ASEAN and East Summit held in Cebu, Philippines in January 2007. The External Affairs Minister participated in the Ministerial meetings preceding the Summits as well as in the Making Ganga Cooperation (MGC) Foreign Ministers' meeting. India's trade with most of the countries in the region showed significant improvement during the year. Cooperation with the ASEAN countries in the fields of agriculture, education, information technology, civil aviation and tourism has also increased substantially. India continued to help Cambodia, Laos, Vietnam and pacific Island countries in their development efforts. India extended humanitarian assistance to Indonesia and the Philippines in the aftermath of natural disasters in these two countries. Defence cooperation and cultural exchanges between India and the countries in the region also continued to show enhanced coverage.

As regards the pacific region, India participated in the Post-Forum Dialogue (PFD) Partners' Meeting held after the conclusion of the Pacific Islands Forum Meeting held on 27 October 2006 in Nadi. Indian delegation was led by Minister of State for External Affairs Shri E. Ahmed. During the Post Forum Dialogue, MOS(EA) announced India's ''Regional Assistance Initiative'' for Pacific Island Forum member countries.

EURASIA

India continued its close, cooperative and extensive interaction with the Eurasian countries during the year. The CIS region, by virtue of its geographical location and vast natural resources, is an area of important strategic and economic interest to India. These states are rich in mineral and fossil fuels, and are undergoing a process of transition to a market economy. Central Asia is a part of our extended neighbourhood and developments in the region have an impact on India's national interests. High-level visits were exchanged on a regular basis with the countries of the region. These were complemented by the visits of trade delegations and through participation in industrial and consumer goods exhibition.

Minister of Petroleum and Natural Gas, Murli Deora, attended, as India's representative, the 6th Shanghai Cooperation Organization (SCO) Summit held in Shanghai on 15 June 2006. India has an observer status with the SCO. Murli Deora also attended as Special Envoy of Prime Minister, the 2nd Summit of the Conference on Interaction and Confidence Building in Asia (CICA) held in Almaty on 17 June, 2006. India is one of the founding members of CICA.

Intensified interactions with Russia that have characterized our bilateral relations, found reflection in the landmark visit of President Vladimir Putin of the Russian Federation on 25-26 January 2007 to India, when he participated as the

Chief Guest at the Republic Day celebrations. A series of important as the Chief Guest at the Republic Day celebrations. A series of important agreements were signed / adopted by the two sides, including a Joint Statement signed by the two leaders, a Joint Statement on nuclear energy cooperation, a Cultural Exchange Programme and agreements on space cooperation, constructing additional nuclear power plants and custom exchanges. Trade and investment, energy, defence, space, science and technology, political dialogue and culture are important focus areas for cooperation between the two countries. Earlier Prime Minister visited St. Peterburg in July 2006 for the Summit of G-8 plus outreach Countries where he also held a bilateral meeting with the Russian President. A Summit-level meeting of India, Russia and China was also held on 17 July 2006 in St. Petersburg which discussed international issues and trilateral cooperation among the three countries. A Foreign Minister's level Trilateral meeting took place on 14 February 2007 in New Delhi.

India exchanged high level official, parliamentary and commercial delegations and cultural troupes with all its other Eurasian partners to pursue its bilateral objectives with respective countries. In this context, the President of Tajikistan visited India in August, 2006 and the Prime Minister visited Uzbekistan in April, 2006. Cultural festivals, seminars, conferences and trade exhibitions were organized regularly; bilateral agreements in various fields were signed, training courses were offered and assistance provided within the parameters of the ITEC programme as well as through other channels.

EUROPE

India's engagement with the European Union continued to strengthen. Europe, particularly a Europe that is uniting would play the role of a key pole in the evolving of multi-polar international system. The Helsinki Summit of October 2006 took significant decisions to progress the India-EU strategic partnership. One of the most important of these is for the two sides to enter into a broad-based trade and investment agreement.

India's engagement with Europe is not only important in the bilateral and India-EU context but in trying to develop common approaches to addressing various global challenges. India shares a strategic partnership with the European Union, and also individually with France, Germany and the UK. During the year, India's engagement with the EU and individual countries in Europe intensified and diversified further as indicated by twelve Summit level interactions (UK, France, Germany, Spain, Belgium, Portugal, Finland, Cyprus, Czech Republic, Romania and Norway) and burgeoning interactions across the board. These included a growing number of parliamentary and ministerial level visits, indicative of growing interest on the part of Europe in interacting with a rapidly growing India as well as our steadily growing cooperation with this part of the world. The co-operation encompassed a wide range of areas from political to trade and investment, culture science and technology.

The EU is India's largest trading partner accounting for 1/5th of India's total external trade. Bilateral trade has steadily grown between 2001 and 2005 at over 10% annually on average to reach Euro 40 Billion in 2005. India and the EU are also important investment partners. Total FDI inflows from the EU to India are around US$ 8 billion. Indian companies have also begun to invest in the EU in recent years. UK, Belgium, Germany, France, Italy and the Netherlands are important trade & investment partners for India.

India-EU relations are firmly based on the shared values of democracy, pluralism and rule of law and have grown exponentially from what used to be a purely trade

and economic driven relationship to one covering all areas of interaction. In order to carry forward their strategic partnership in these various areas, India and the EU adopted a comprehensive Joint Action Plan in 2005, the first time that India has adopted such an Action Plan with any of its partners.

There was strong focus on India in Germany in 2006. India was the Partner Country at the Hangover international Trade Fair; Guest of Honour Country at the Frankfurt Book Fair and the focus country at the Bonn Biennale art festival.

A defence Cooperation Agreement was signed with Germany, a Social Security Agreement was signed with Belgium, and a Mutual Legal Assistance Treaty was signed with Portugal. The Festival of India (Oct. 2006-Jan. 2007) was organized by ICCR in collaboration with Palais des Beaux-Art in Brussels.

GULF

The year 2006-07 witnessed further consolidation of India's relations and bilateral interactions with the countries of the Gulf. The Amir of Kuwait paid a successful visit to India in June 2006. Trade and economic relations witnessed significant expansion underscored by the success of the Second Industrial Conference held between India and Gulf Cooperation Council (GCC) states in March 2006 in Muscat, Oman. Joint Commission meetings were held with Oman, Saudi Arabia and Kuwait coupled with exchange of visits by several trade and commercial delegations with the countries of the region. The first round of negotiations to enter into a Free Trade Agreement between India and GCC states in Riyadh in March 2006 was one of the many steps to tap the immense potential that exists for trade and economic cooperation. The finalisation of a number of bilateral agreements helped further strengthen the institutional framework for cooperation. The Saudi Cabinet on 11 September 2006 approved the Agreement on Double Taxation Avoidance with India which was signed during the visit of King Abdullah to India in January 2006.

During 2006-07, relations with Iran were further strengthened through regular exchanges. The External Affairs Minister Pranab Mukherjee visited Iran on 6-7 February 2007. The impetus provided by high level discussions have contributed to cooperation in diverse areas including strategic and security spheres. The burgeoning trade relations that have witnessed over 43% increase over the previous year have placed bilateral relations on a new trajectory. India's commitment to strengthening its bonds of friendship with Iran for mutual prosperity and peace and stability in the region has been reiterated at the highest level. The trilateral talks between India, Pakistan and Iran on the Iran-Pakistan-India Gas Pipeline Project are continuing. The Sale Purchase Agreement for purchase by India of 5 million metric tonnes per annum of LNG for a period of 25 years commencing 2009, signed in 2005, awaits ratification by Iranian side. Iran wants the price to be renegotiated.

WEST ASIA AND NORTH AFRICA

India's relations with the countries of West Asia and North Africa continued to witness significant growth during the year 2006-07. There were several high level incoming as well as outgoing visits of the leaders. Indian investment and trade with these countries grew significantly.

Among important visits were the visit of King of Jordan along with Queen Rania to India from 30 November-2 December 2006 and the holding of the 5th round of Joint Commission Meeting with Egypt in New Delhi on 16 December 2006 co-chaired by EAM and Egyptian Foreign Minister Ahmed Aboul Gheit. The Moroccan Foreign Minister, Mohammed Benaissa visited India from 25-27 June 2006 and the

Morocco Parliamentary Friendship Group led by Speaker of the Lower House visited India from 27 November-1 December 2006. The Indo-Israeli Parliamentary Friendship Group also met for the first time in New Delhi during the visit of Prof. Solmo Breznitz on 3 November 2006. The Minister of Trade, Industry, and Labour of Israel, Eliyahu Ben Yishai visited India on 3-8 December 2006.

Minister for Agriculture Sharad Pawar, led a delegation for participation in the ''Afritech Exhibition'' in Israel from 9-11 May 2006. Minister of State for Industry Dr. Ashwini Kumar visited Morocco from 7-9 December 2006 in connection with India being selected as "Guest of Honour" for the International Conference, "Fundamental of Investments''. Also foreign Office Consultations were held at Algiers (June) and Cairo (November) 2006. Bilateral trade with WANA countries has significantly improved. India has also invested in a major way in the hydrocarbon, fertilizers and power sectors in WANA countries.

AFRICA (South of Sahara)

In Sub-Saharan Africa, India has strengthened its engagement at bilateral, regional and Pan African levels for upgradation of relations with various countries of the region. Special emphasis has been given to capacity building, technical assistance and HRD, grant assistance for development projects and credit lines. India supports the New Partnership for Africa's Development (NEPAD) and has announced a line of credit of US$ 200 million to assist the NEPAD objectives. The Pan African e-Network project, undertaken at the initiative of the Hon'ble President envisages inter connectivity of 53 nations of the African Union (AU) by a satellite for tele-education and tele-medicine facilities from India to the AU member countries. India's dialogue with the African Union (AU) has led to the decision to work for the establishment of an India-Africa Forum. India has been one of the largest contributors to peacekeeping in Africa. India currently has 3500 troops in DRC, 3000 troops in Sudan and about 1000 in Ethiopia and Eritrea.

There has been a growing recognition in the region that India can be an ideal partner in economic development and a reliable source of affordable products, services and technologies in sectors as diverse as agriculture and small industries on one hand, and IT and space technology on the other.

WEST AFRICA

In recent years India has intensified its traditionally warm and cordial links with the countries of West and Central Africa. The year witnessed some important visits which have further deepened our ties with the region at not only the bilateral level but also at a regional and institutional level. Prof. Alpha Oumar Konare, Chairperson of the Commission of the African Union visited India in December 2006 which was the first ever visit of Chairperson of AU Commission to India. A high power delegation from ECOWAS visited India to secure India's participation in infrastructural development of West Africa.

As an important part of our economic diplomacy during the year, Ministry of External Affairs continued its active participation in the India-Africa Project Partnership Conclaves organized by the Confederation of Indian Industry (CII). Three Regional Conclaves of India-Africa Project Partnership were held in Lusaka, Addis Ababa and Accra in April-May 2006 to give a boost to our economic and commercial relations with Africa. Their deliberations were consolidated at the Pan African Conclave held in October, 2006 in New Delhi.

The TEAM-9 Initiative, a techno-economic cooperation venture between India and 9 countries of West Africa, continues to provide an effective impetus to deepen India's relations with several important countries of West Africa. Projects of a value of over US$ 200 million are under implementation under Lines of Credit (LoC) in the TEAM-9 countries. A new initiative was undertaken in 2006 when during his visit to Ghana, Anand Sharma, Minister of State for External Affairs, announced a new LoC for US$ 250 million which would result in increased opportunities for our companies in key sectors of the economy in West Africa. An agreement to extend a US$ 250 million LoC by Government of India to the ECOWAS Bank for Investment and Development was signed. The impact of these initiatives on our relationship with countries of West Africa region was evident in the visit of President of Gabon and Foreign Minister level visits that India received from countries like Cote d'Ivoire, Nigeria, Benin, Senegal, Ghana, Angola, Republic of Congo and DR Congo.

EAST AND SOUTHERN AFRICA

Several initiatives were taken to upgrade relations with our traditional partners of Eastern and Southern African region, at the bilateral, regional and Pan-African levels. India hosted several high level visits from the region; President of Botswana Festus G. Mogae, paid a State visit to India from 7-12 December 2006. Deputy President of South Africa Phumzile Mlambo-Ngcuka, paid an official visit to India in September 2006; Vice-President of Mauritius, Abdoul Raouf Bundhun, visited India from 7-16 may 2006; and the 2nd Vice President of Burundi, Marine Barampanna, paid official visit to India from 6-11 October 2006. The Foreign Ministers of Comoros, Namibia, Uganda, and Tanzania visited India during the period June - December 2006. A multi-ministerial delegation from Malawi led by Foreign Minister, Davies Katsonga, visited India in May, 2006. India hosted parliamentary delegations from Ethiopia, Tanzania, Kenya, Namibia, Lesoto and South Africa.

From the Indian side, President visited Mauritius in March 2006 as the Chief Guest for its National Day celebrations. Prime Minister visited South Africa in September-October, 2006 in connection with the Centenary celebrations of the launch of Satyagraha Movement by Mahatma Gandhi. Union Minister for Shipping visited South Africa in March, 2006 to sign the Bilateral Agreement on Maritime and Merchant Shipping. Minister of State for Human Resource Development visited Ethiopia (May, 2006) to attend the First Pan-African Conference on Information an Communication Technology. Minister for Health an Family Welfare, visited Johannesburg, South Africa (June, 2006), to participate in the African Traditional Meicine Workshop. Minister of Small Scale Industries paid an official visit to Rwanda and Uganda (August-September, 2006). MOS for Agriculture visited Ethiopia an Namibia (November, 2006). MOS for External Affairs, Anand Sharma visited the Republic of South Africa on 24-25 March 2006. MOS also visited Rio de Janeiro to attend the 3rd India-Brazil-South Africa (IBSA) Trilateral Commission Ministerial Meeting from 28-30 March 2006. He also visited South Africa and Namibia in April, 2006, the latter for the launch of the India-Southern African Development Community (SADC) Forum.

India upgraded its relations with regional organizations: India-Southern Africa Development Community (SADC) Forum was launched in Namibia in April 2006. The First India-Common Market for East and Southern Africa (COMESA) Ministerial meeting was organized in New Delhi in October 2006. The First India-Common Market for East and Southern Africa (COMESA) Ministerial meeting was organized

in New Delhi in October-2006 in which five ministers from member countries of COMESA participated.

Indian Technical and Economic Cooperation (ITEC) programme including deputing of experts and projects assistance continued to be extended to the countries of the region. A separate training programme on ''Industrial Development'' was organized by the Ministry along with CII. Over 1000 officials from the region received training in India under the ITEC programme.

UNITED STATES

India-US relations have been transformed by the key understandings forged during the visit of Prime Minister to Washington DC in July 2005 followed by the visit of President Bush to New Delhi in March 2006. Last year was marked by a broadened India-US dialogue on bilateral, regional and global issues of mutual interest. This encompassed strategic and security issues, defence, counter-terrorism, science and technology, health, trade, space, energy, maritime cooperation, and environment which reflect the transforming nature of the India-US bilateral relationship.

Prime Minister met President Bush agani in St. Petersburg on 17 July 2006 on the margins of the G-8 Summit. The two leaders reviewed several aspects of the bilateral relationship and, amongst other things, discussed cross-border terrorism and the Indo-US civil nuclear cooperation.

President Bush's visit to India in March 2006 : President Bush accompanied by First Lady Mrs. Laura Bush paid a State visit to India from 1-3 March 2006 and visited New Delhi and Hyderabad. President Bush had a meeting with the Prime Minister and the two jointly addressed a Press Conference visit also saw an agreement on India's nuclear separation plan under the bilateral civil nuclear understanding. The India-US CEO Forum set up during Prime Minister's visit in July 2005 submitted its report which aimed at substantially broad-basing and accelerating India-US economic and trade relations. President Bush also called on President Dr. A.P.J. Abdul Kalam and received UPA Chairperson Sonia Gandhi and the leader of Opposition L.K. Advani.

CIVIL NUCLEAR ENERGY

Several steps were taken by both sides to implement the understanding on resumption of civil nuclear energy co-operation that was reached in July 2005. It represents an important landmark in the evolving bilateral ties between the two countries. Under this understanding, India finalized its Separation Plan in March 2006 which was tabled in Parliament by the Prime Minister on 7 March 2006. The Separation Plan lays down the schedule for placing India's nuclear reactors under safeguards beginning from 2007. It is envisaged that 14 out of the current 22 thermal power reactors would be placed under IAEA safeguards.

The Hyde Act, that legally enables resumption of full civil nuclear energy cooperation between India and U.S. was passed by the U.S. Congress on 8-9 December 2006 and signed into law by President Bush on 18 december 2006. Both sides are working on a bilateral civil nuclear agreement to determine the parameters of such cooperation. US has initiated discussions with the Nuclear Supplier's Group (NSG) to adjust its guidelines. In addition, India is engaged directly with various NSG countries. India will be engaging the IAEA to negotiate an India-specific IAEA safeguards agreement.

The US Government has supported India's inclusion in several significant international initiatives. In April 2006, India and United States concluded a Framework Protocol under which India has joined the Government steering Committee of Future Gen, an international public-private partnership to develop new, commercially viable technology for a clean coal near-zero emission power project. India was also admitted to the International Thermonuclear Experimental Reactor (ITER) Initiative as a full member during the meeting of ITER negotiators on 6 December, 2005 held at Jeju South Korea.

TRADE & ECONOMY : India's economic partnership with the US is growing rapidly. US is India's largest trade partner and leading foreign investor. The total trade in merchandise and commodities stood at US$ 26.76 billion in 2005, an increase of 23.6% over 2004. For the first ten months of 2006 (January-October), bilateral trade stood at US $ 26.55 billion. During President Bush's visit, both sides set the goal of doubling bilateral trade within three years. In June 2006, Commerce and Industries Minister Kamal Nath visited Washington D.C. for a meeting of the Indo-US trade Policy Forum. This was followed by a meeting in November 2006 in New Delhi led by Commerce Secretary and US Deputy trade Representative Karan Bhatia. The India-US Economic dialogue co-chaired by Deputy Chairman, Planning Commission, Dr. Montek Singh Ahluwalia and the director of the National Economic Council and Assistant to the US President on Economic Policy, Allan Hubbard, has been tasked with following up expeditiously with the CEO Forum on implementation of the recommendations. In regard to the Knowledge Initiative on Agriculture, US Agricultural Secretary paid a visit to India in November 2006 when the 4th Meeting of the Knowledge Initiative Boar also took place.

DEFENCE : The India US Defence Policy Group (DPG), which is the apex institutional dialogue mechanism for defence held its eighth meeting in New Delhi on 15-16 November, 2006 during which the entire gamut of bilateral defence relations including military-to-military contacts, joint exercises, exchange of visits, issues of procurement and joint production and research and development were reviewed. The subgroups under the DPG also held their separate meetings. The defence Procurement and Production Group met for the second time in New Delhi on 12-13 November 2006. The Senior Technology Security Group met in September 2006 in Washington while the Military Cooperation Group held a meeting in New Delhi in October 2006.

Malabar 2006, the annual bilateral naval exercise between the Indian and the US navies took place towards the en of October 2006.

ENERGY AND ENVIRONMENT

The Five Working Groups under the India US Energy Dialogue - Oil & Gas, Power & Efficiency, New technology and renewable Energy, Coal and Civil Nuclear Energy-carried out a series of collaborative activities and initiatives. The Working Group on Oil and Gas met in July 2006; the Working Group on Coal met in April 2006; and the Working Group on New Technology and Renewable Energy met in May 2006. India and US have been collaborating actively in the Asia Pacific partnership on Clean Development and Climate, which is a multilateral initiative launched in January 2006.

SCIENCE & TECHNOLOGY

The Indo-US Science & Technology Forum held its Eighth governing Body Meeting

on 7 December, 2006 in New Delhi. Dr. Arden Bement, Director of the National Science Foundation (NSF), led a high level delegation to India in October 2006. The delegation met with a wide cross-section of scientists, academics and students in India to explore ways to increase bilateral interaction in Science & Technology.

The 2nd Meeting of the India-US Information & Communication Technology Working Group was held on 13 December, 2006.

CANADA

Relations with Canada continued to expand in various fields. Prime Minister Harper's Government has prioritised trade and investment, S&T and environment technology as specific areas of cooperation with India. The Canadian department of Foreign Affairs, in a document tabled in Canadian Parliament in September 2006 highlighted the need for Canada to further develop its relations with rising powers such as India. Canada announced its willingness to supply nuclear-related dual use items to Indian civilian nuclear facilities under IAEA safeguards in accordance with the Nuclear Suppliers Group's dual-use guidelines.

Dr. R.A. Mashelkar, Director General, Council of Scientific and Industrial Research, (CSIR) visited Ottawa in June 2006 and held discussions with Dr. Arthur Carty, Principal Scientific Adviser to the Prime Minister of Canada for launching a bilateral industrial research programme, developing a strategic partnership between the National Research Council of Canada and CSIR of India to undertake technology development aimed at global markets, and launching a programme of networking young scientists from the two countries.

Official level discussions were held in Ottawa in September 2006 to carry forward the dialogue on nuclear issues that began the previous year during the then External Affairs Minister's visit to Canada in September 2005.

India and Canada agreed to consider resumption of defence contacts with official level exchanges between Staff Colleges and exchange of invitations to observe air exercises in the two countries.

LATIN AMERICAN COUNTRIES

Relations with the countries of Latin America and the Caribbean continue to evolve. The effort was, in particular, to add substantive trade and economic content to our traditionally warm and friendly relations with the countries of the region with which we are bound by common values and principles that we share, including the principles of democracy, pluralism, respect for multi-culturalism and multi-ethnicity. The effort is to reduce the physical distance between India and Latin America and the Caribbean and work together to increase connectivity and build on the growing complementaries and opportunities for co-operation.

During 2006-07, relations with the region were strengthened and diversified with exchange of high level visits, Joint Commission meetings and Foreign Office Consultations. The visit of Prime Minister to Brazil an Cuba was the first ever visit to the region after a gap of 20 years. The relations with Brazil have been upgraded to a strategic partnership. The visit of the Vice President to Guyana and trinidad and Tobago further intensified our traditional linkages with the Caribbean region. The bilateral trade with almost all the countries in the region has continued to increase. A number of Indian companies have started seriously pursuing investments and joint

ventures in the region. Academic, cultural and educational exchanges have also increased. The cricket stadium in Guyana built with India's financial assistance of US $ 25 million, including a grant component of US $ 6 million was inaugurated in November 2006.

United Nations and other International Organisations

Prime Minister Dr. Manmohan Singh led the Indian delegation to the 14th NAM Summit in Havana in September 2006. In his highly acclaimed statement, he emphasized India's strong commitment to NAM and called for new NAM initiatives on energy security, Africa and West Asia.

The External Affairs Minister led the Indian delegation to the General Debate of 61st UNGA Session in September 2006 in his capacity as the then Defence Minister. His statement at the General Debate covered a number of major issues including the need to address the inequities in the global economic and financial order, Millennium Development Goals and comprehensive reform of the UN, and was widely acclaimed. He also led the Indian participation at the 30th Annual Ministerial Meeting of the G-77 held in New York on 22 September 2006, besides attending a meeting of the Common wealth Foreign Ministers as well as the inaugural meeting of the Foreign Ministers of BRIC (Brazil, Russia, India and China).

India has been actively involved in the reform process at the UN stressing the imperative for this to enhance the UN's ability to serve the interests of the majority of its membership, which is from developing countries. The decision-making structure at the UN especially the Security Council, need to be reflective of contemporary realities. This would also bring about greater legitimacy and ownership of important decisions among the membership of the UN. India also made effective contributions to the on going discussions on other major elements of UN reform including revitalization of UNGA, strengthening of ECOSOC, the UN's development agenda and reform of its management structures and procedures.

With a view to maintaining momentum towards reform and expansion of the UN Security Council in both permanent and non-permanent categories, India maintained constant contact and coordination with Brazil, Germany andJapan in the Format of the G-4 Group of Countries which have been working together for this purpose. Intensive contacts and deliberations were also maintained with other members of the United Nations. High level Indian delegations attended the AU Summits. Without diluting India's commitment to seeking a permanent seat at the UN Security Council, India also announced its bid for the non-permanent seat at the UN Security Council for the term 2011-2012.

India was elected as a member of the Organisational Committee of Peace-building Commission of the UN under the category of top five providers of military personnel and civilian police to the UN peace-keeping operations. India contributed an amount of US$ 2 million to the Peace-building Fund.

India was also elected to the newly set up Human Rights Council in May 2006 with the highest number of votes among the contested seats and will be contesting for membership of the Council again in 2007. India has been an active participant in the discussions on human rights issues at the UN and the recently formed Human Rights Council, including on its mandates and work methods. India also engaged in the deliberations that led to the adoption of the Convention on the Rights of Persons with

Disabilities and is among the countries that signed the International Convention on the Protection of All Persons from Enforced Disappearance on the day when it opened for signature.

India has been fully engaged in the global discussions on sustainable development and climate change including proactive participation in the formulation of positions and negotiations at the meetings of the UN Framework Convention on Climate Change and its Kyoto Protocol given the critical implication that these can have for India's growth and development. The involvement in climate change issues has also included interactions with key countries and in India's participation in partnerships for clean technologies.

With growing capacity and willingness to assist in the area of humanitarian assistance, India contributed US $2 million to the UN's Central Emergency Response Fund and has a member on its Advisory Board.

India has always been mindful of the vulnerabilities of countries with special needs such as the Least Developing, the Land Locked Developing Countries and the Small Island Developing States. Our participation at the review meeting in New York on the UN's plan of action for these groups was at Ministerial Level. We have also undertaken specific efforts to assist Small Island Developing States and those from the Islands in the Pacific Ocean.

International Migration issues have become another important issue on the global agenda. India participated at the Ministerial level at the High-Level Dialogue on International Migration and Development at the UN.

While welcoming the adoption of a Counter-Terrorism Strategy by the UNGA in September 2006, India continued to pursue the important issue of expeditious finalization of a Comprehensive Convention on International Terrorism for which it had presented a draft as far back as in 1996. It accepted a visit by a delegation of UN counter-terrorism experts in November 2006 which was mutually beneficial.

During the year 2006, India and its nominees were elected to several UN and International organizations which included Inter-governmental Cultural Heritage of UNESCO, Executive Council of International Telecommunication Union, UN Human Rights Committee, INTERPOL, the International Law Commission and the Radio Regulation Board of ITU.

India made further commitments for enhancing cooperation with the Commonwealth and played an active role in its various fora and initiatives. It agreed to host the International Partnership Summit of the Commonwealth Connects Programme of which it is the largest contributor.

At 6th Asia-Europe Meeting (ASEM) held in Helsinki in September 2006, India along with other Asian members, were invited to join ASEM. On receiving formal invitation from the Asian-ASEM Coordinators, China and Brunei, India accepted membership of the 45-member group of ASEM.

MULTILATERAL ECONOMIC RELATIONS

India continued its policy of active engagement with various economic groupings like ASEAN, EAS, MGC, BIMSTEC, IOR-ARC, IBSA, G-15, G-8 etc so as to further deepen its integration with the world economy and to reap the benefits of natural synergies with various regions. India participated at the ASEAN-India and the East

Asia Summits as well as the MGC Foreign Ministers' meeting held in Cebu, Philippines in January 2007. The ASEAN leaders acknowledged that India is one of their most active dialogue partners and emphasized the cultural and civilization links with India.

The Prime Minister led the Indian delegation to the 1st IBSA Summit held in Brasilia, Brazil, in September 2006 where 5 trilateral agreements in the areas of maritime transportation, bio-fuels, agriculture, and information technology and trade facilitation were signed. Prime Minister participated in a meeting of the outreach countries of the G-8 Summit held in St. Petersburg, Russia in July 2006, signaling India's willingness to constructively contribute to the endeavour to find global solutions to the challenges being faced by the international community. India continued its efforts with the developing countries to evolve common positions on issues and cause of common interest and to further the same in the integrated world economy.

SAARC : India successfully hosted the 14th SAARC Summit in New Delhi on 3-4 April 2007. The SAARC Car Rally was a curtain raiser to the 14th SAARC Summit. Afghanistan joined SAARC as the 8th Member of the Summit in New Delhi. Five countries / organisations viz. People's Republic of China, Japan, Republic of Korea, the USA and the European Union, also attended the Summit as 'Observers'. The two Inter-governmental Agreements on the establishment of the South Asian University and the SAARC Food Bank were signed during the 14th SAARC Summit. Within this year, a regional tele-medicine network connecting two hospitals in each of the SAARC countries with super-specialty hospitals in India will be implemented. The Museum of Textiles and Handicrafts will begin its activities in November 2007 with an exhibition-cum-sale of artifacts, crafts and textiles from the region. The 14th Summit also called for early operationalisation of the SAARC Development Fund (SDF). At the 13th Summit (Dhaka, November 2005) it was decided to set up a SDF. The SDF will have three windows-social, economic and infrastructure. India has offered US$ 100 million for projects to be implemented in other SAARC countries. SAFTA entered into force from 1 January, 2006 and was operationalised from 1 July, 2006.

DISARMAMENT

India's commitment to non-discriminatory and universal nuclear disarmement and the global elimination of all Weapons of Mass Destruction continued to be reflected in its policy pronouncements and diplomatic initiatives. India's stand on issues related to disarmament and international security in various multilateral and regional forums was premised on India's national security interests and its tradition of close engagement with the international community to promote cooperative efforts at addressing these challenges.

At the regional level, India's participation in the confidence and security building process and structure under the ASEAN Regional Forum (ARF) and Conference on Interaction and Confidence Building Measure in Asia (CICA) acquired greater momentum. Regular contacts were maintained with key international and non-governmental organisations active in the field of disarmament with a view to disseminating the Indian perspective on disarmament issues.

India has been exercising control over exports of sensitive goods and technologies which can have direct or indirect application for weapons of mass

destruction or their means of delivery. The enactment in June 2005 of Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activates) Act reflect India's responsible attitude as well as its commitment to contributing to the objective of global peace and security.

India signed International Convention on Suppression for Acts of Nuclear Terrorism on 24 July 2006.

TECHNICAL & ECONOMIC COOPERATION ACTIVITIES

Technical cooperation constitutes an important element in the conduct of diplomatic relations with developing countries. Under the Indian Technical and Economic Cooperation (ITEC) programme India's bilateral assistance is extended to the developing countries, from Asia, Africa, Latin America, Eastern Europe, Central Asia and the Island countries in the Pacific and the Caribbean regions. ITEC programme has six components viz: (i) training in India of nominees of ITEC partner countries (both civilian and military training courses); (ii) Deputation of Indian experts abroad; (iii) Gifting of Indian equipment; (iv) Study visits of senior officials to India; (v) Projects and project related assistance such as supply of equipment, consultancy services and feasibility studies; (vi) Aid for Disaster Relief (ADR). In 2006-07 some 4000 participants from 156 ITEC / SCAAP partner countries were accepted to the 220 courses of diverse disciplines. 39 Institutions were empaneled to conduct the courses. The training courses are aimed at capacity building and human resource development in the developing countries. During 2006-07, 58 experts were deputed oversees at the request of various countries and the fields covered by them were information technology, dairy farming, town planning, defence, fisheries, agriculture, legal affairs, and telecommunications. Requests for increased assistance in this area were conveyed at various bilateral meetings including at the highest level from the developing world. The programme also assumed new dimension with regional and multilateral organizations actively associating themselves with the programme.

In advancing further and strengthening India's 'development partnership' with other developing countries, increasing emphasis is being placed on the delivery of development projects as part of India's overall economic development cooperation programme. Simultaneously, further progress is being made in developing in-house expertise in project delivery with a view to maximizing cost-effectiveness, expeditious delivery, and optimum coordination. Under this programme in 2006, an IT training centre was set up at Havana, called ''India-Cuba Knowledge Centre', which was inaugurated in September 2006 on the occasion of the XIV NAM Summit.

India's humanitarian programme of relief and solidarity to disaster-struck parts of the world was continued as before.

CONSULAR, PASSPORT AND VISA SERVICES

There are presently 31 Passport Offices and 16 Passport Collection Centers in India. It is proposed to open new Passport Offices at Amritsar, Dehradun, Raipur, Shimla, Coimbatore, and Madurai in 2007. A number of measures have been taken to make the passport issuance system simpler and speedier for the comfort and convenience of the public like decentralization and on-line applications.

Indian Embassies in Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE in the Gulf region have introduced, with effect from April 2006, provision of free legal aid for two hours twice a week to Indian workers to resolve labor related issues.

Visa waiver agreements with Mongolia and Mexico came into force in February 2006, thereby increasing the number of such countries to 35. Efforts are being made to sign such agreements with other countries.

The process of computerization of passport and visa sections has been completed in London, New York, Islamabad, Kuwait, Dubai, Abu Dhabi, Muscat, Dhaka, Riyadh, Madrid, Paris, Singapore, and Colombo. The process of computerization in remaining missions and posts is going on.

The Ministry has embarked on several projects with a view to modernizing and upgrading the passport / visa issuance system, like centralised printing of passports, issuance of e-passports and outsourcing of visa work.

FOREIGN SERVICE INSTITUTE

The 2005 batch of IFS Probationers completed their training with the Institute in January 2007. The 2006 Batch of the IFS Probationers have commenced their one year comprehensive training programme with the Foreign Service Institute from January 2007.

The Institute maintains regular contacts with other training institutions. A special training programme was organized for the first time for officers from the Cabinet Secretariat in May, 2006. Since April 2006, four Basic Professional Courses have been organized by the Foreign Service Institute for the training of staff and officials of the Ministry. The First Orientation Course for IFS (B) Grade-I officers was conducted by the Institute in July 2006.

The 40th and the 41st Professional Courses for Foreign Diplomats (PCFD) were organised from 1 February-10 March and 4 October 10 November 2006 respectively. Twenty eight diplomats from 26 countries attended the 40th PCFD and twenty five diplomats from 21 countries participated in the 41st PCFD. A special four week course for 20 diplomats from Afghanistan was organised in April 2006.

FSI hosted the Deans of counterpart institutes in Croatia, Bulgaria and Mexico and issues such as mutual cooperation and exchange programmes were discussed with them.

PROPAGATION OF HINDI ABROAD

Consistent with the Official Language Policy of the Government, the Ministry has been making special efforts for progressive use of Hindi in official work. All important documents like bilateral treaties, Agreements, MoUs, speeches of the Minister, Annual Report of Ministry, replies to Parliament Questions and all other documents required to be presented in the Parliament were prepared bilingually. Hindi software, Hindi-English, English-Hindi dictionaries were provided to Indian Missions / Posts abroad in order to enable them to work in Hindi. To promote and propagate Hindi abroad, Regional Hindi Conferences were organised in Sydney (Australia) and Abu Dhabi (UAE). Hindi learning kits, text-books, magazines, books on Hindi literature, children Hindi books were sent to Missions / Posts abroad for Missions' libraries and also for donating to local universities and other educational institutions engaged in teaching of Hindi. World Hindi Day was celebrated on 10 January 2006 for the first time by many of Indian Missions abroad. Hindi forms an integral part of Foreign Service Institute's Training programme. Use of Hindi in the passport offices is also monitored through quarterly progress reports and inspection of passport offices. 63 students

from 26 countries were given admission in the Kendriya Hindi Sansthan, Agra to study Hindi. The Ministry extends necessary support for the correspondence course for overseas students conducted by Central Hindi Directorate.

INDIAN COUNCIL FOR CULTURAL RELATIONS

The Indian Council for Cultural Relations (ICCR) was formally set up in 1950, with the primary objective of establishing, reviving and strengthening cultural relations and mutual understanding, between India and other countries. The Festival of India in Japan was inaugurated by the Prime Minister in Tokyo in December 2006 and the ICCR is coordinating various events during the India-Japan Friendship Year, 2007 which will include business seminars, exhibitions, performing art events, fashion shows, a film festival, food festivals, seminars, talks / lecture by eminent personalities and souvenir shops. The Festival of India in Belgium was held for a period of four months form October 2006 to January 2007 at the Palais des Beaux-Arts. The ICCR also sponsored 67 cultural delegations to 54 countries covering all the continents of the world and in addition hosted a number of incoming foreign cultural delegations. As part of its scholarship programme ICCR offered approximately 1300 scholarship under various Schemes.

INDIAN COUNCIL OF WORLD AFFAIRS

In accordance with the objectives of the Indian Council of World Affairs Act, 2001, ICWA carried on its various activities by organizing special addresses, seminars and meetings on important issues. During the period April-December, 2006, the Indian Council of World Affairs organized a number of events such as lectures, seminars, bilateral strategic dialogues and background briefings. On an average, between 80-150 persons attended each of the lectures while the seminars attracted between 50-100 persons each.

ICWA's Magazine "India Quarterly" was on track during 2006. ICWA has signed Memorandum of Understanding (MoU) with counterpart organisations in five countries: Malaysia, Tajikistan, Mexico, Portugal and Poland.

OVERSEAS INDIANS AND THE MINISTRY OF OVERSEAS INDIAN AFFAIRS

The size, spread and the growing influence of overseas Indians today are truly impressive. Estimated at over 25 million in 130 countries, the overseas Indian community comprises Persons of Indian Origin (PIO) and Non-Resident Indians (NRI). Overseas Indians constitute a significant and successful economic, social and cultural force in the world. This vast and diverse overseas Indian community grew out of a variety of causes - mercantilism, colonialism, and globalisation - and over several hundreds of years of migration in different waves.

During the nineteenth century and until the end of the Raj, much of the migration was to other colonies as indentured labour for plantations and mines in the Atlantic, Pacific and the Indian ocean regions and under the ‘Kangani’ system to Southeast Asia. The major destinations were Mauritius, Guyana, Trinidad, Jamaica, Fiji, South and East Africa, Malaya, Ceylon and Burma. The event that triggered this mass migration was the Slavery Abolition Act passed by the British Parliament on August 1, 1834, which freed the slave labour force throughout the British colonies. This resulted in an extreme shortage of labour throughout the British colonies which was resolved by massive importation of workers engaged under contracts of indentured servitude.

In independent India, there have been two distinct categories of migration; the migration that began in the early 1950s as Indians from the subcontinent moved to the United Kingdom, Europe, North America and Austra-asia. This migration to the western world was permanent and the migrants were mostly educated and well qualified. The second phase was the large outflow of unskilled, semiskilled and skilled workers to the countries in the Gulf region which began in the mid-1970s. This migration was temporary with a large number of workers returning on completion of their contracts.

The vastly different origins and roots of the migrants, the divergent routes and patterns of migration and settlement, the varying degrees of social-cultural integration with their new homelands and the emergence of new identities and ethos make the overseas Indian community unique. It is a reflection of the pluralism that India today represents - a confluence of many languages, cultures and histories.

With increasing globalisation, the Indian diaspora is growing and becoming even more visible, successful and influential across a wide variety of sectors and virtually every walk of life. Yet it is difficult to speak of one great 'Indian Diaspora'. There are communities within communities whose bond with India and the manner and extent of engagement is marked by its own experiences as well as time and distance.

A nuanced understanding of the diversity of the overseas Indian community brings before us the idea of the 'Global Indians' and the invisible thread that holds them together and binds them with India, the idea of 'Indian ness'. The Prime Minister best articulated this in January 2005 while inaugurating the Pravasi Bharatiya Divas:

''The idea of 'Pravasi Bharatiya' has been in the making throughout the 19th and 20th Century. Today, at the dawn of the 21st century it is an idea whose time has truly come. We sepeak different languages, we practice different religions, our cuisine is varied and so is our costume. We are over a billion Indians and over 25 million overseas Indians, living in 130 different countries. Yet, there is a unifying idea that binds us all together, which is the idea of "Indian-ness".

The Ministry and its Mandate

The Ministry of Overseas Indian Affairs (MOIA) is a young Ministry. Established in May 2004 as the 'Ministry of Non-Resident Indians' Affairs', it was renamed the 'Ministry of Overseas Indian Affairs' (MOIA) in September 2004.

The MOIA is the nodal Ministry for all matters relating to overseas Indians comprising Persons of Indian Origin (PIO), Non-Resident Indians (NRIs) and Overseas Citizens of India (OCI). The Mission of the Ministry is to promote, nurture and sustain a mutually beneficial and symbiotic relationship between India and overseas Indians. In achieving this mission the Ministry is guided by four key policy imperatives:

First, the overseas Indian community has distinct and often-varied expectations from the home country, the Ministry must provide for this wide range of roles and expectations.

Second, there is a need to bring a strategic dimension to the process of India's engagement with its overseas community, take a medium to long term view and forge partnerships that will support sustained engagement.

Third, overseas Indians represent a reservoir of knowledge and resources in

diverse fields - economic, social and cultural - and that this reservoir must be drawn upon as partners in development.

Finally, the States of India are important players in this process. Any initiative that overseas Indians, individually or collectively, take must be anchored in one of the States.

The policy focus of the Ministry, therefore, is to establish an institutional framework that can support sustainable engagement and can benefit from networks with and among overseas Indians.

Given the diversity and geographic spread of the overseas Indian community and with it, the emergence of distinct region / country specific ethos, the needs and expectations of the overseas Indians vary considerably. The policies, programmes and the schemes of the Ministry are, therefore, designed to meet these wide ranging needs and expectations and include:

(1) OVERSEAS CITIZENSHIP OF INDIA (OCI) SCHEME

In response to a long and persistent demand for ''dual citizenship'' particularly from the Diaspora in North America and developed countries and keeping in view the Government's deep commitment towards fulfilling the aspirations and expectations of Overseas Indians, Prime Minister Dr. Manmohan Singh had announced at the Pravasi Bharatiya Divas 2005 held in Mumbai the grant of Overseas Citizenship of India (OCI) to all Persons of Indian Origin where local laws permit ''dual citizenship'' in some form or the other except Pakistan and Bangladesh Accordingly, the citizenship (Amendment) Ordianance was promulgated on 28.06.05 amending the Citizenship Act, 1955 extending the facility of Overseas Citizenship of India (OCI) to Persons of Indian Origin (PIOs) of all countries (who were citizens of India or eligible to become citizens of India on 26 January, 1950 and are citizens of the countries (except Pakistan and Bangladesh). The Citizenship (Amendment) Act was passed in August 2005. This is not to be construed as 'dual citizenship' since it does not confer political rights. Any Overseas Indian applicant who is comfortable with his present citizenship status in the country of his residence can apply for OCI.

(2) SCHOLARSHIP PROGRAMME FOR DIASPORA CHILDREN (SPDC):

This scheme seeks to make higher education in India accessible to the children of overseas Indians and promote India as an education hub. Under the scheme, the Ministry provides 100 scholarships for undergraduate courses in Engineering, Technology, Humanities / Liberal Arts, Commerce, Management, Journalism, Hotel Management, Agriculture, Animal Husbandry, etc. (except medical courses) to partially fund the tuition and hostel fees each year from 2006-07. The students are selected on the basis of an entrance test conducted by M / s Educational Consultants India Limited (Ed.CIL), an autonomous body under MHRD with whom the Ministry is working on a partnership basis.

(3) KNOW INDIA PROGRAMME (KIP)

The Ministry organises four week internship programmes for diaspora youth to promote awareness about contemporary India, its socio-cultural diversities, the rapid economic transformation underway and thus help the younger generation of overseas Indians bond with India. The scheme 'Know India Programme' (KIP) earlier known as 'Internship Programme for Diaspora Youth' (IPDY) is implementing partnership with the State Governments and the logistics support of the Nehru Yuvak Kendra.

(4) ESTABLISHING A PIO UNIVERSITY

In keeping with the commitment given at the highest level and in view of recommendations made by the High Level Committee on the Indian Diaspora (HLCID), the Ministry is to set up a PIO / NRI University in India for the benefit of children of overseas Indians. The University will be set up by Overseas Indian Trusts or Societies with credibility and experience in the field of education under the overall supervision of the Ministry of Overseas Indian Affairs. The University will have the status of ''Deemed University'' under Section 3 of the UGC Act.

Ministry had invited proposals for the establishment of the University. Proposals received in this regard are being examined.

(5) PRAVASI BHARATIYA DIVAS

Pravasi Bharatiya Divas is the flagship event of the Ministry of Overseas Indian Affairs. This is organized with a view to connecting the vast Indian diaspora and bringing the knowledge, expertise and skills on a common platform.

The fifth PBD was organized at New Delhi from 7-9 January, 2007 with the partnership of the Confederation of Indian Industry (CII) and supported by the Government of National Capital Territory of Delhi. The theme of the 5th PBD was ''Rooting the Roots''. The event inaugurated by the Prime Minister culminated with the conferment of Pravasi Bharatiya Samman Awards by Rashtrapatiji at the valedictory session on 9th January, 2007. The other highlights of PBD 2007 included a three day Convention, featuring diverse themes with eminent speakers, Trade and Industry Exhibition, Business Networking and Cultural Evenings. The focus will be on Education, Healthcare, Youth, Women, Investment, Technology, Media, etc.

The sixth PBD is scheduled on 8-9 January, 2008 and will be held at New Delhi with the partnership of the Confederation of Indian Industry (CII) and supported by the Government of the National Capital Territory of Delhi. The theme of the event will be ''Engaging the Diaspora : the way forward''.

This year the Ministry also took part and organized Pravasi Bharatiya Divas (PBD) on 23rd September, 2007 as part of the India @60 celebrations organized by the Government in New York.

(6) PRAVASI BHARATIYA SAMMAN AWARDS

Pravasi Bharatiya Samman Award (PBSA) were introduced in 2003 to recognize achievements of the Indian Disapora. The guidelines of PBSA have been revised and the Award shall be conferred on a Non-Resident Indian, Person of Indian origin or an organization or institution established and run by the Non-Resident Indians or Persons of Indian Origin, who has made (a) significant contribution towards better understanding abroad of India and support to India's causes and concerns in a tangible way; (b) significant contribution for the welfare of diaspora; (c) notable contribution in philanthropic and charitable work and for social and humanitarian causes in India and abroad; (d) significant contribution in building closer links between India and its diaspora in the economic, cultural and scientific fields; (d) eminence in one's field for outstanding work which has enhanced India's prestige in the country of residence; or (e) eminence in his skills which has enhanced India's prestige in that country (for non-professional workers). Nominations for the Award could be made by Heads of Indian Diplomatic Missions abroad, Chairman of the

Department Related Parliamentary Standing Committee of the Ministry of Overseas Indian Affairs, Prominent Overseas associations with nation-wide character as may be decided by the Ministry of Overseas Indian Affairs and awardees of Pravasi Bharatiya Samman Award. The Vice President of India is the ex-officio Chairman of the Jury-cum-Awards Committee. The maximum number of Awards will be a maximum of 15 per year. In 2007, 15 distinguished overseas Indians were selected for the Award.

EMIGRATION OF LABOUR

Overseas Indian Workers are estimated at over 5 million, with a net outflow of about a million each year, excluding returnees. A significant number of the overseas Indian workers are women. The vast majority of these workers are temporary migrants and 90 per cent of them work in the Gulf. These workers often face difficult living and working conditions in the host country and put up with separation from their families for considerable periods of time.

The economic and social significance of these important constituents of Overseas Indians can be judged by the spectacular growth in remittances by migrant Indian Workers from the Gulf. In 2005-06, India was the highest recipient of remittances from Overseas Indians estimated at over US $ 23 billion. About 45 per cent of these remittances - estimated at about US $ 12 billion - are the contribution of the unskilled and semi-skilled Overseas Indian Workers.

The temporary migration of unskilled, semi-skilled or skilled workers mostly to the Middle-East is unique, in that, the social cost of education or vocational training is modest while the economic and social benefits derived from remittances or skill formation are significant.

There is evidence to suggest that remittances in the aggregate as well as per capita from Overseas Indian Workers are significantly higher than remittances from others. Overseas Indian Workers are at the lower end of the income scale; their remittances however, not only support household consumption back home but also provide resources for investment in the rural sector, particularly agriculture, Return migration however, can increase the incidence of unemployment by exerting pressure on the scarce job opportunities in the rural areas.

One of the key functions of the Ministry for Overseas Indian Affairs is to look after all emigration under the Emigration Act, 1983 from India to overseas countries. The Act seeks to protect emigrants from exploitation by unscrupulous agents and foreign employers and provides the framework for regulating recruitment and emigration of Indian workers seeking employment overseas on a contractual basis.

The migration process extant tends to be exploitative for the overseas Indian workers and needs transformation into a more orderly economic process modernized to bring about the transformation into a more orderly economic process offering a win-win for all shareholders. The regulatory framework needs to be modernized to bring about the transformation with emphasis on greater transparency, better regulation and deterrent punishment. The focus of the ministry has been therefore, on making the migration process humane and orderly. The Ministry has taken the following initiatives in this regard.

(i) Pre-Departure Orientation and Skill Upgradation :

The Ministry of Overseas Indian Affairs launched a ‘Skill upgradation and pre-departure orientation-training’ programme for emigrant workers during 2006-07, in partnership with the State Governments. The primary objective of the scheme is to make potential Overseas Indian workers globally competitive by helping them to upgrade their skills to meet the needs of the international labour market.

(ii) Social Security Agreements

During the year 2006-07 a pioneering Social Security Agreement with Belgium was signed. Work has commenced to negotiate and conclude similar agreements with other countries in the European Union with a large Indian population like the Netherlands, France, Norway and Sweden. These agreements will provide for exemption from social security contributions for Indians working in these countries on short-term contracts of up to five years and export of benefits for those who have worked for a longer term and choose to relocate to India. The agreement provides for reciprocity in its application.

(iii) Bilateral MOU for Protection and Welfare of Workers

In the 1980s bilateral labour agreements were signed with Qatar and Jordan. The Ministry of Overseas Indian Affairs after its creation took a strategic decision to sign bilateral labour MOUs with all the major traditional countries of destination for Indian emigrants with a view to secure the commitment of the Governments of these countries towards protection and welfare of Indian emigrants.

MOIA has signed MOUs with the UAE and Kuwait and has initiated MOU with Malaysia. An additional protocol to the existing agreement with Qatar has also been finalized. Negotiation with Oman will take place shortly. The Ministry is keen to initiate negotiations with the other major receiving countries as well for expeditious signing of MOUs. Draft MOUs have already been sent to Bahrain, Saudi Arabia, Jordan and Yemen for this purpose.

(vi) Council for Promotion of Overseas Employment

In a rapidly globalizing world there is a need to bring a strategic dimension to the process of emigration of Indians abroad in search of employment and to forge partnerships that will best serve India as a supplier of skilled and trained manpower and meet the expectations of the Overseas Indian Workers (OIW) as a significant constituency across the world.

Efforts need to be made on an ongoing basis to identify future overseas employment opportunities, the emerging labour supply gaps, country / sector specific skill requirements, make realistic projections and plan for overseas deployment of workers, disseminate relevant information in the rural areas and implement a sustained skill upgradation programme to match the market requirement.

To meet the above requirements Ministry has initiated a proposal for constituting a ‘‘Council for Promotion of Overseas Employment (CPOE)’’. The CPOE will function as a strategic ‘Think Tank’. The Ministry of Overseas Indian Affairs will take policy action on the recommendations of the CPOE which will work as an independent professional body. CPOE will also commission studies for analyzing the trends in the international labour market and developing future strategies.

OTHER SCHEMES AND POLICY INITIATIVES OF THE MINISTRY

(i) E-remittance Gateway and On line Financial Services

(WWW.OVERSEASINDIAN.IN)

A World Bank report 'Global Economic Prospects' puts remittances of Non-Resident Indians (NRIs) to India at around U$ 23.7 billion in 2005. Of this, a little less than half is estimated to be the remittances from Indian workers in the Gulf.

Though there are several remittance facilities available in the market, overseas Indians have limited choice of either using the fast but expensive facility the economic but relatively slow facility to remit money back home. Keeping this in view, the Ministry decided to partner with the UTI bank to develop an integrated, universal, electronic, remittance gateway that combines the virtues of economy, speed and convenience. This portal also extends financial advisory services called 'Pravasi Bharatiya Seva' on investment, taxation and real estate to potential overseas Indian investors.

This e-remittance gateway launched in 2006 is aimed primarily for the benefit of the workers in the Gulf and enables overseas Indians to remit money to designated accounts in any of the 23000 bank branches in India, operating on Real Time Gross Settlement (RTGS) network of the RBI. The facility at present covers Qatar and the UAE.

The financial services for overseas Indians provided through this portal gives real time data and information to overseas Indians on matters relating to taxation, the capital markets and the real estate market to enable potential investors to make well informed investment decisions. The advisory services are fully operational and are available on the www.overseasindian.in portal.

(ii) AAPI-India Rural Health Initiative

The Ministry signed a MoU with AAPI in 2006 to take up initiatives in healthcare all over the country starting with pilot projects into States i.e. Andhra Pradesh and Bihar. The partnership with AAPI and the states provides a framework to tap diaspora knowledge resources to promote and implement innovative and best practices in healthcare in Indian States. The objective of this project is to create a template in rural heathcare through pilot projects, which can then be replicated in other states. The states of Andhra Pradesh and Bihar are the pilot States.

The project envisages canalizing the knowledge resource of AAPI to train the local medical practitioners for early detection and medication of different diseases like Carcinoma Cervix, Diabetes, Heart disease, Carecinoma Prostate and Deafness in children. It also seeks to build capacities in the community to undertake preventive measures and raise awareness on the need for a healthy life style. The project is expected to start on a pilot basis in the states of Andhra Pradesh and Bihar in the beginning of the next financial year.

(iii) Problems Relating to NRI Marriages

The problem of Overseas Indians marriages is complex since it falls within the purview of private international law. It is also a social issue. Alliances with overseas Indians in the Indian society are seen as promising better future for not just the woman but her entire family. In the eagerness not to let go off such promising offers the families sometimes ignore even the common cautions that are observed in traditional match

making. In the absence of proper precautions and sufficient fact finding there is sometimes mismatch of expections leading to desertion of Indian women.

The approach of the Ministry in addressing these issues has been to create awareness amongst prospective brides and their families regarding their rights and responsibilities. The Ministry has brought out a guidance booklet on ''Marriage to Overseas Indians'' for the benefit of prospective brides and their families which contains information on safeguards available to women deserted by their NRI spouses, legal remedies available, authorities that can be approached for redressal of grievances and non-governmental organizations which can provide assistance. Information pamphlets have also been brought out in English, Hindi and regional languages. The Ministry has also organized Conferences and Seminars to create awareness on this issue.

The Ministry has requested the States to implement Supreme Court's judgment in the case of Seema vs. Ashwani Kumar to make laws for compulsory registration of marriages which will be a safeguard against fraudulent marriages.

Besides these, the Ministry has launched a scheme to provide legal / financial assistance to women in need and facing desertion / divorce proceedings in courts overseas through Indian Missions abroad in USA, UK, Canada, Australia, New Zealand and countries in the Gulf.

(iv) OVERSEAS INDIAN CENTRES

The Government has approved setting up three Overseas Indian Centre at Dubai, Kuala Lumpur and New York to provide medical, legal and financial counseling to the overseas Indian workers in the Gulf countries. The Centre headed by a Counsellor will provide professional assistance and requisite guidance to the needy workers.

(v) OVERSEAS INDIAN FACILITATION CENTRE

An ''Overseas Indian Facilitation Centre'' to provide a host of investment and business advisory services to potential overseas Indian investors has been set up and has become operational from 28th May, 2007. The Overseas Indian Facilitation Centre will serve as a ''one-stop shop'' for the overseas Indian community for all matters relating to investing in India. The centre which is a 'not for profit' trust established in partnership with the Confederation of Indian Industry will seek to promote overseas Indian investment in India and business to business partnership between entrepreneurs in India and overseas Indian entrepreneurs.

(vi) PRAVASI BHARATIYA KENDRA

The proposal to establish a ''Pravasi Bharatiya Kendra'' was suggested by the High Level Committee on Indian Diaspora to provide a suitable place to commemorate the trials and tribulations, as well as the subsequent evolution and achievements of the diverse Indian Diaspora. The Kendra would become the focal point for interactions between India and the Diaspora and would also in course of time, become the hub of various activities aimed at creating pride in the achievements of India and the Diaspora. It would be an ideal centre to facilitate harnessing of the talent pool amongst overseas Indians.

Land for Pravasi Bharatiya Kendra has been acquired in Chanakyapuri, New Delhi and NBCC have been entrusted with the consultancy services for the Project.

Looking ahead at 2007-08, the Ministry has planned several activities targeting specific outcomes for the benefit of the vast and diverse overseas Indian community. While there is high interest amongst overseas Indians to invest in India, there is a need for a market-driven institutional platform that will facilitate a two-way flow of overseas Indian investments into India and promote business-to-business partnerships of Indian businesses with overseas Indians.

Overseas Indians have also responded to India's call to be catalysts for development and contribute in nation-building activities back home. Another initiative proposed, therefore, is to establish a credible institutional platform to enable overseas Indians to contribute to the social development process in India by providing avenues to overseas Indians for philanthrophy in education, health and rural development in India.

18 Industry

INDIA started her quest for industrial development after Independence in 1947. The Industrial Policy Resolution of 1948 marked the beginning of the evolution of the Indian Industrial Policy. The Resolution not only defined the broad contours of the policy; it delineated the role of the State in industrial development both as an entrepreneur and as authority. Successive policy resolutions also reiterated this basic till in favour of the public sector. The Industrial Policy Resolution of 1956 gave the public sector a strategic role in the economy. It categorised industries which would be the exclusive responsibility of the State or would progressively come under State control and others. Earmarking the pre-eminent position of the public sector, it envisaged private sector coexisting with the State and thus attempted to give the policy frame work flexibility.

The Industrial Policy initiatives undertaken by the Government since July, 1991 have been designed to build on the past industrial achievements and to accelerate the process of making Indian industry internationally competitive. It recognises the strength and maturity of the industry and attempts to provide the competitive simulus for higher growth. The thrust of these initiatives has been to increase the domestic and external competition through extensive application of market mechanisms and facilitating forging of dynamic relationship with foreign investors and suppliers of technology. The process of reform has been continuous.

STRUCTURAL REFORMS

INDUSTRIAL LICENSING POLICY

With the introduction of the New Industrial Policy (NIP) in 1991, a substantial programme of deregulation has been undertaken. Industrial licensing has been abolished for most items. Presently Industrial licensing is required in the following cases:

a) for manufacture of an item under compulsory licensing, or

b) the project attracts locational restriction applicable to large cities with population more than 10 lakh (according to 1991 census), or

c) when an item reserved for small scale sector is intended to be manufactured by an undertaking other than small scale industrial Only the following 5 industries are under compulsory licensing on account of security, strategies and environmental concerns:

   (i) distillation and brewing of alcoholic drinks

   (ii) cigars and cigarettes of tobacco and manufactured tobacco substitutes;

   (iii) electronic aerospace and defence equipment all types;

   (iv) industrial explosives including detonating fuses, safety fuses, gun powder, nitrocellulose and matches;

   (v) Specifies hazardous chemicals i.e. (i) Hydrocyanic acid and its derivatives, (ii) Phosgene and its derivatives and (iii) Isocyanates & disocyanates of hydrocarbon, notelse where specified (example Methyl isocyanate)

Industries not covered under compulsory licensing are required to file an Industrial Entrepreneurs (Memorandum (IEM) to Secretarial for industrial Assistance (SIA), provided the value of investment on plant and machinery of such unit is above Rs. 10 crore.

A significant number of industries had earlier been reserved for public sector. The policy has been liberalised progressively and presently the areas reserved for the public sector are : (a) atomic energy; (b) the substances specified in the schedule to the notification of the Government of India in the Department of Atomic Energy number S.O.212(E), dated the 15th March, 1995, and (c) railway transport.

The Government continues to provide protection to the small scale sector, inter-alia, through the policy of reserving of items for exclusive manufacture in the small scale sector. Recently Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 have been enacted by the Government. In this Act investment limit for Micro Enterprises, Small Enterprises and Medium Enterprises have been prescribed as Rs. 10 Lakh, Rs. 5 crore and 10 crore respectively, Industrial undertakings other than the small scale industrial undertakings engaged in the manufacture of items reserved for exclusive manufacture in the small scale sector are required to obtain an industrial license and undertaken export obligation of 50 percent of their annual production. However, the condition of licensing is not applicable to such industrial undertakings operating under 100% Export Oriented Under takings Scheme, the Export Processing.

The list of items reserved for manufacturing in the SSI Sector is being reviewed from time to time. Presently, 114 items are reserved for manufacture in the small scale sector.

FOREIGN DIRECT INVESTMENT (FDI)

Major changes in the recent years

Government of India embarked upon major economic reforms since mid-1991 with a view to integrate with the world economy, and to emerge as a significant player in the globalization process. Reforms undertaken include decontrol of industries from the stringent regulatory process; simplification of investment procedures, promotion of foreign direct investment (FDI), liberalization of exchange control, rationalization of taxes and public sector divestment.

The FDI policy was liberalized progressively through review of the policy on an ongoing basis and allowing FDI in more industries under the automatic route.

The major changes made in the policy aimed at rationalization / simplification of procedures are listed below:

1. Policy Liberalization / rationalization

(a) FDI up to 100% under the automatic route permitted in Construction Development projects including housing, built-up infrastructure, commercial complexes etc. subject inter-alia, to minimum capitalization; minimum area condition and lock-in period of original investment (Press Note 2 / 2005 refers). These conditions are not applicable to Hospitals, Hotels, SEZs, and Non-resident Indians.

(b) FDI caps have been increased to 100% and automatic route extended to coal & lignite mining for captive consumption' setting up infrastructure relating to

PRODUCTION OF SELECTED INDUSTRIES

marketing in Petroleum & Natural Gas sector, and exploration and mining of diamonds and precious stones.

(c) FDI has been allowed up to 100% on the automatic route in Power trading and processing and ware housing of coffee and rubber.

(d) FDI has been allowed up to 51% for 'Single brand' product retailing which requires prior Government approval. Specific guidelines have been issued for governing FDI for 'single brand' product retailing.

(e) FDI up to 49% allowed with prior Government approval in Air Transport Services.

(f) FDI up to 100% allowed on the automatic route in Greenfield airport projects. FDI up to 100% also allowed in existing airports but FDI beyond 74% requires prior Government approval.

(g) Mandatory divestment condition for B2B e-commerce has been dispensed with.

(h) FDI cap in basic and cellular telecom services has been enhanced from 49% to 74%. Detailed guidelines have been notified vide Press Note 5 (2005 series) substituted by Press Note 3 (2007)

(i) FDI is being allowed along with FII and portfolio investing within the ceiling of 20% in the FM Radio Broadcasting services.

(j) FDI up to 49% allowed with prior Government approval for setting up Up-linking HUB / Teleports.

(k) FDI up to 100% allowed with prior Government approval for up-linking non-news TV channels.

(l) FDI up to 26% allowed in up-linking of news and current affairs TV channels.

2. Procedural simplification

(a) FDI is permissible under the automatic route wherever the sectoral policy so specifies except where the foreign investor has an existing joint venture or technology / trademark agreement in the same field. In such cases prior approval of the Government is required for FDI irrespective of the sectoral policy permitting FDI on the automatic route. (Press Note 1 (2005) reters).

(b) Transfer of shares from resident to non-resident (including NRIs) placed on the automatic route where initial investment is allowed on the automatic route and where Press Note 1 (2005) is not attracted.

(c) Conversion of ECBs and preference shares on the automatic route.

(d) FDI in manufacturing sector including those where an Industrial lience is required, has been allowed on the automatic route without any caps. Exceptions are manufacture of cigars and cigarettes and defence items where prior Government approval is required for FDI and manufacture of items reserved for the small scale sector. In the defence sector, FDI is permitted only up to 26%. (Press Note 4(2006) refers).

3 FDI Data

- Total FDI into India since the onset of liberalization process is US$54.6 billion till March 2007. This represents only the inflows as equity capital.
- Inflows during Jan-December 2006 was US$11.19 billion as compared to US $4.36 billion in 2005 and US$3.75 billion in 2004.

- Financial year-wise inflows are :

2004-2005	US$	3.2 billion
2005-2006	US$	5.5 billion
2006-2007	US$	15.73 billion

FOREIGN INVESTMENT IMPLEMENTATION AUTHORITY

Foreign Investment Implementation Authority (FIIA) was established in the Department of Industrial Policy & Promotion, Ministry of Commerce & Industry to facilitate quick translation of foreign Direct Investment (FDI) approvals in helping them obtain necessary approvals, sort out operational problems and meet with various government agencies to find solution to problems of the investors. The FIIA may co-opt other Secretaries to the Government of India. Chief Commissioner (NRI), top functionaries of financial institutions and professional experts from industry and commerce, as and when necessary. The secretariat for Industrial Assistance (SIA) in the Department functions as the Secretariat of the FIIA.

The Department of Industrial Policy and Promotion has initiated steps to establish a 'Government to Business' (G2B) Portal. The portal envisages creating a business-friendly environment in the country by providing efficient, transparent and integrated electronic services to the investors, industries and business. The portal aims to provide for approvals, clearances and permissions, reporting, filing payments and compliances through single electronic window right from the stage of registration to the entire life cycle of business. Proposed e-Biz follows the international model of 4-stage evolution, i.e., information, interaction, transaction and integration of the portal initiative in relation to provision of electronic services.

Considering the vast scope and complexities of the e-Biz project, initially a pilot project is being implemented, covering the business-government interface in six Central government Departments viz., Department of Industrial Policy & Promotion, Ministry of Company Affairs, DGFT, Central Board of Direct Taxes, Central Board of Excise and Customs, Ministry of Environment and forests, RBI and four State Government viz., Maharashtra, Haryana, Uttar Pradesh and Andhra Pradesh integrating 25 G2B services belonging to Central (14 Services), State (8 Services) and localbodies (3 Services). The project has been awarded to CDAC led consortium on 31 December 2005. The Project is to be implemented in 9-12 months.

Industrial Scenario: Indian economy has been growing at the rate of over 8% in thelast few years. Gross Domestic Product (GDP) increased by 9.0% in 2005-06 as compared to 8.5% in 2003-04 and 7.5% in 2004-05. Industry and Manufacturing played a significant role in contributing to this growth.

Industrial Production : GDP emanating from industry recorded a growth rate of 9.6% and manufacturing recorded a growth rate of 9.1% in 2005-06. As per the latest Revised Estimate of the CSO the economic is estimated to grow by 9.4. GDP emanating from Industry and manufacturing is expected grow by 10.9% and 12.3% respectively in 2006-07.

GROWTH RATES IN GDP AT 1999-2000 PRICES

Industry	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Industry	6.4	2.7	7.1	7.4	9.8	9.6	10.9
mining & quarrying	2.4	1.8	8.8	3.1	7.5	3.6	5.1

manufacturing	7.7	2.5	6.8	6.6	8.7	9.1	12.3
electricity, gas & water supply	2.1	1.7	4.7	4.8	7.5	5.3	7.4
construction	6.2	4.0	7.9	12.0	14.1	14.2	10.7
GDP at factor cost	4.4	5.8	3.8	8.5	7.5	9.0	9.4

Source: Central Statistical Organization

QE: Quick Estimate RE revised Estimate

Industrial Production in term of Index of Industial Production (HP) : The momentum of industrial growth has been maintained during the financial year 2006-07, with an overall industrial growth rate of 11.3 in comparison to 8.2 per cent during last year. This was sustained by the robust performance of the manufacturing sector which witnessed with a growth of 12.3 per cent, it has a weightage of about 80 percent in the IIP.

Growth (in per cent) in the Index of Industrial Production
(Base : 1993-94 = 100)

Sector	Weight (per cent)	2004-05	2005-06	2006-07
Mining	10.5	4.4	1.0	5.1
Manufacturing	79.4	9.2	9.1	12.3
Electricity	10.2	5.2	5.2	7.2
Overall	100.0	8.4	8.2	11.3
Use Based Classification				
Basic Goods	35.6	5.5	6.7	10.2
Capital Goods	9.3	13.9	15.8	17.7
Intermediate Goods	26.5	6.1	2.5	17.7
Consumer goods (total)	28.7	11.7	12.0	10.0
Con. Durable	5.4	14.4	15.3	9.0
Con. Non-durable	23.3	10.8	11.0	10.3

Source: Central Statistical Organisation

From a use-based perspective, capital goods, intermediary, basic and consumer goods registered double digits growth rates of 17.7, 11.7, 10.2 and 10.0 per cent respectively in 2006-07. Capital as well as consumer goods, both had posted a double digit growth during 2004-05 and 2005-06.

Disaggregte industrial profile at the two-digit level for the manufacturing sector during 2006-07 shows by and large even spread of industrial growth. A major turn around has been seen in sectors like metal products & parts, rubber, plastic petroleum and coal products, wood & wood products & furniture & fixtures and food products. However, there were sectors such as Jute and other vegetable fiber textiles. Leather & fur Products; Other Manufacturing Industries which registered low growth rate:

Growth Rates in Industrial Production: 2 Digit Classification

Industrial Group	Weight	2004-05	2005-06	2006-07
Food Products	9.08	-0.4	2.0	8.2
Beverage, tobacco & Products	2.38	10.8	15.7	11.3
Cotton Textiles	5.52	7.6	8.5	14.8
Wool, Silk and Man made fibre textiles	2.26	3.5	0.0	8.2
Jute and other vegetable fiber textiles	0.59	3.7	0.5	-17.2
Textile Products	2.54	19.2	16.3	11.2
Wood & wood products & furniture & fixtures	2.70	-8.4	-5.7	29.1
Paper & Paper Products	2.65	10.5	-0.9	8.3
Leather & fur Products	1.14	6.7	-4.8	0.3
Basic Chemical & chemical products	14.00	14.5	8.3	9.2
Rubber, plastic, petroleum and coal products	5.73	2.4	4.3	12.7
Non-metallic mineral products	4.40	1.5	11.0	12.8
Basic metals & alloy industries	7.45	5.4	15.8	22.8
Metal Products & Paris	2.81	5.7	-1.1	11.4
Machinery and equipment	9.57	19.8	12.0	14.0
Other Manufacturing Industries	2.56	18.5	25.2	6.5
Minning & Quarrying	10.47	4.4	1.0	5.1
Manufacturing	79.36	9.2	9.1	12.3
Electricity	10.17	5.2	5.2	7.2
Overall	100.00	8.4	8.2	11.3

Performance of Six Core Infrastructure Industries : Peformance of six core industries (i.e, electricity, crude petroleum, petroleum refinery products, coal, steel and cement, with combined weightage of 26.7 per cent in the IIP) is considered as an indicator of the economic health of the economy. Their output registered a growth of 8.6 per cent during 2006-07 as compared to 6.2 percent last year. Industry - wise growth rates are given in the Table below.

Growth Rates (per cent) of Six Core Industries

	Weight	2004-05	2005-06	2006-07
Crude Petroleum	4.3	1.8	-5.3	5.6
PetroleumRefinery Products	2.0	4.3	2.4	12.6
Coal	3.2	6.2	6.6	5.9
Electricity	10.2	5.2	5.1	7.3
Cement	2.0	6.6	12.4	9.1
Finished Steel	5.1	8.4	11.2	10.9
Overall	26.7	5.8	6.2	8.6

LIGHT ENGINEERING INDUSTRY

The Indian engineering industry forms the crucial backone of the economy and is intricately linked with umpteen other core sectors for its demand. The engineering industry derives its demand from capacity creation in core sectors viz., power, infrastructure, mining, oil and several other sectors including general manufacturing sector, consumer goods industry, automotive andprocess industries.

Light engineering industry consists of a number of distinctive sectors and sub-sectors. The sector includes diverse items like castings, forgings, fasteners, bearings, steelpipes and tubes and highly seplisticated microprocessor based process control equipments and diagnosticand medical instruments.

The production figures of major light engineering / electrical industries during 2006-07 are asunder :

Sl No.	Items Groups	AccountingUnit	Production April '06-March 07
1.	Steel Castings	Tonnes	522040.00
2.	Razor / Blades (all kinds)	Mill. Nos.	8432.60
3.	Stamping & Foregings	Tonnes	412139.0
4.	Spun pipes	Tonnes	102128.00
5.	Ball & Roller Bearings	Lakhs Nos.	3278.48
6.	Bolts & Nuts	Tonnes	90629.00
7.	Process Control Instruments	Rs. Lakhs	28432.65
8.	Bicycle of all kinds	Th. Nos.	10536.54
9.	Medical & Surgical Instruments	Rs. lakhs	30151.24
10.	Valves (all kinds)	Rs. lakhs	162594.77

CEMENT INDUSTRY

Cement is one of the most technologically advanced industries in the country. It plays a crucial role in the housing and infrastructure sector of the economy. The price and distribution control of cement has been removed since 1989 and it has been exempted from licensing in 1991 under the Industrial (Development & Regulation) Act, 1951. Since then, cement industry has made rapid strides both in capacity / production and process technology. It not only ranks second inthe production of cement in the world but also produces quality cement which meets global standards. As on 1st April 2007, there are 129 large cement plants with an installed capacity of 11.10 million tonnes per annum. The production during 2006-07 was 161.31 million tones, registering a growth of 9.13 percent over provious year. Export of cement and clinker was 8.95 million tonnes in 2006-07.

India is producing, different varieties of cement like Ordinary Portland Cement (OPC), Portland Pozzolana Cement (PPC), Portland Blast Furnace Slag Cement (PBFS), Oil well Cement, White Cement, etc. These different varieties of cement are produced as per BIS specifications and the quality is comparable with the best in the world. The cement industry has kept pace with global technological immensely toconserve energy and fuel and to save materials substantially.

LEATHER INDUSTRY

The leather Industry occupies a prominent place in the Indian economy in view of its substantial export earnings, employment potential and growth. The leather sector provides employment mainly to people from the disadvantaged sections of society. More than 30 per cent of the work force employed in this sector is women.

The leather sector in India has a comparative advantage due to abundant supply of raw hides and skins, high level of technological preparedness, vast human resources and a skill-based industrial sector. However, its share of global leather

trade is less than three per cent. Although, there have been several measures to increase the technology preparedness of the sector during the previous plan period, the level of investment in the sector has not been commensurate with the requirements.

The export of leather and leather products from India has undergone a structural change during the last two decades. India was traditionally an exporter of raw hides and skins and semi-processed leather. However, in the last two decades the share of leather footwear, leather garments, leather goods, footwear components and several other articles of leather in the total exports has increased substanitially as a result of the Government's policy to encourage export of value added leather products presently, export of raw hides andskins is discouraged by levying an export duty of 60 per cent and value addition is encouraged by allowing duty-free import of raw hides / skins.

The export performance of the leather sectorin the last 6 years ispresentied in the table below :

(In million US $)

Product	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Finished Leather	382	459	509	556	577	606
Footwear including footwear component	639	655	625	768	856	1035
Leather Garments	460	379	272	301	320	328
Leather Goods	483	443	469	592	628	511
Total	1964	1936	1875	2217	2381	2480

All the items of manufacture in the leather sector except full PVC footwear Chappals, Sandals and Shoes and Metal fittings for leather Goods and Garments have been dereserved from the SSI list vide Notification No. S.O.603 (E) dated 29 June 2001 and S.O.No. 649(E) dated 3 June 2003.

An Inter-Ministerial Committee under the Chairmanship of Member (Industry), Planning Commission has been constituted on 6 January 2006 in order to analyze the strength and weaknesses of the Indian leather industry with a view to evolving a comprehensive strategy for the development of the leather sector.

During the 10th Plan, the Government of India provided assistance for modernization, technology upgradation, capacity building and infrastructure for the Leather Sector under the scheme "Indian Leather Development Programme" (ILDP) with an outlay of Rs. 400 crore. The ILDP consisted of two components: (a) "Integrated Development of Leather Sector" (IDLS) with plan outlay of Rs. 290 crore aimed at technology upgradation, modernization and expansion of leather, fotwear, footwear component and leather goods sector, and (b) "Infrastructure Strengthening of Leather Sector" (ISLS) with plan outlay of Rs. 110 crore is aimed at

infrastructure development and capacity building in all segments of the leather industry.

The scheme "Integrated Development of Leather Sector" (IDLS) was notified on 3 November 2005 for technology upgradation and modernization in all segments of the leather industry, namely, tanneries, footwear components, saddlery, leather goods and garments, Financial assistance under the scheme is provided for plant and machinery to theextent of 30 percent for SSI and 20 per cent for non-SSI units subject to a ceiling of Rs. 50 Lakh. The scheme is being implemented through two Project Implementing Units viz. Central Leather Research Institute at Chennai for the tannery sector and Footwear Design and Development Institute at Noida forleather goods and garments, saddlery, footwear and footwear compoint, small Industries Development Bank of India has been appointed as the nodal bank for the scheme. 411 cases pertaining to the involving Government of India's assistance amount to Rs. 70.75 crores has been approved. It has been proposed to continue the scheme to the 11th Plan.

The ISLS Scheme comprised of the following projects: (i) Setting up of a leather complex (tannery), (ii) Setting up of a footwear Complex, (iii) Setting up of footwear Component Parks, (iv) Setting up of a Leather Goods Export Park, (v) INTECHEMART, (vi) HRD Mission, (vii) Saddlers Development Project, (viii) Global Benchmarking, (ix) Support to Rural Artisans, (x) Non-Leather Footwear Sector, (xi) Opening of branch of FDDI at Fursatgunj, (xii) Accreditation of FDI by PFI, Germany.

The major achievement of ISLS implemented during the 10th plan are as under:-

Under the Scheme 'Support to Rural Artisans' marketing and technology support to Indian traditional and ethnic footwear products like Mojari, Jooti and Kolhapuri were provided. A display centre for ethnic footwear has also been established at Footwear Design and Development Institute campus.

Under this scheme INTECHMART roadshows and Leather fairs were organized with the aim to strengthening market accessibility to Indian leather products and promote Foreign Direct Investment and Foreign Collaborations.

16" Saddle trees developed under Saddlery Development. The Automatic Hole punching machine has also been developed up to the stage of prototype. The commercialization would be done soon.

Promotion and marketing of "ethnic footwear" product such as MOJARI, JOOTI and KOLHAPURI. Apart from the above, promotions undertaken under Support to Rural Artisans. Also more than 3500 artisan households making MOJARI were trained under the scheme.

About 1.6 lakh people in the industry right from the stage of collection of faw hides and skins to supervisors / managers in product industry were provided training under HRD Mission.

75 leather units enrolled under Global Benchmarking which provides international standards like ISO 14000, ISO 18000 etc., to a number of leather units.

FDDI has been accrediated by Pruf-und For eshungs institute for die schuhher stellung (PFI) Germany and therefore, the FDDI has become an institute with CE testing facility. reaslising the strength of this sector, the Department has proposed

an ambitious plan for providing further impetus to all segments of this industry during the 11th Five Year Plan.

RUBBER GOODS INDUSTRY

The Rubber Goods manufacturing industry is exempt form industrial licensing. However, some of the rubber goods like cycle tyre and tubes, canvas hoses, rubber washers, chappals and balloons, etc. are reserved for exclusive manufacture in the small scale sector. Tyres and tubes, surgical gloves, prophylactic, conveyer and V-belts, hose popes, sports goods etc., are major rubber goods produced in India.

The industry employs about 5 lakh people directly and indirectly. In 2006-07 there were 5500 units in the small scale sector. In 2006-07, while the turnover of the tyre industry exceeded Rs. 14,500 crore, the turnover of the non-tyre rubber industry stood at Rs. 75,00 crore.

PAPER AND NEWSPRINT INDUSTRY

The paper industry has a vital role to play in socio-economic development of the country. The per capita consumption of paper is generally considered as a bene mark of a country's modernization. The Indian paper industry, which is century old, has made steady progress and withessed a moderate production growth rate. There are around 700 paper mills producing nearly 5.8 million tones of paper and paperboard and around 0.91 million tones of newsprint against an estimated operational capacity of nearly 7.5 million tones of paper and paperboard and about 1.44 million tones of newsprint respectively. The projected demand for the paper, paperboard and newsprint is expected to touch 8.3 million tones by the year 2010. The per capita consumption of paper, which is the bench mark of modernization of any country, stands at 7.0 kg for India, which is far below in comparison to the global average of 50 kg.

The paper and newsprint industry is highly fragmented with the installed capacities ranging from 2 tones to 800 tones per day. Indian paper industry can broadly classified into three segments - (a) Large integrated mills using bamboo and wood. (b) Medium mills using agri-residue and recycled fibre, and (c) Small mills using agro residue and waste paper / recycled fibres. All the three segments are contributing,, equally inproduction of paper, paperboard and newsprint in thecountry. The turnover of the industry is about Rs. 16,000 crore and contributes about 2500 crore to national exchequer. The Indian paper industry employs three lakh persons directy and 10 lakh persons indirectly.

In the wake of economic liberalization, the Indian paper industry found itself confronted with global competition which has an evolutionary effect on the traditional Indian management style, resulting in a serious redesign of strategies. Today the concept of globalization, ecological compatibility and the related environmental issues are being integrated at the planning level by the major industry players. In the last 2-3 years, some of the pulp and paper industry have embarked on expansion and modernization plans to increase their production capacities. The major issues confronting the industry are: inadequate availability of good quality cellulosic raw material, obsolete technology, high cost of basic inputs, quality and environmental concerns.

SOAPS & DETERGENTS INDUSTRY

The Soaps and Detergents Industry had developed both in the small-sector and

organized sector. Detergents and Toilet Soaps are exempt from industrial license. Ninety per cent of the production of laundry soap is in the small-scale sector. Toilet soap is, however, dominated by the large-scale units. Production of soaps and Detergents during 2006-07 was 4,69,576 tonnes and 9,75,887 tonnes respectively.

NEW INDUSTRIAL POLICY AND OTHER CONCESSIONS FOR SPECIAL CATEGORY STATES

The New Industrial Policies and other concessions for the States of Jammu & Kashmir, Himachal Pradesh & Uttarakhand and North Eastern States have been announced on 14.06.2002, 07.01.2003 and 01.04.2007 respectively to acclearte industrial development of the States as these States are hilly and suffer from geographical isolation, inaccessible terrain, poor resource base and remoteness to larger markets and poor infrastructure. Under the Policy package, various concessions have been allowed to industrial units in the States which include excise duty and income tax exemptions for a period of the years from the date of commencement of commercial production, Central Capital Investment Subsidy Scheme @ 15% on investment in plant and machinery subject to a ceiling of Rs. 30 lakh, Central Interest Subsidy Scheme @ 3% on the working capital loan and Central Comprehensive Insurance Scheme to theextent of 100% on capital investment.

INDIAN TEXTILES

The Indian Textiles Industry has an overwhelming presence in the economic life of the country. Apart from providing one of the basic necessities of life, the textiles industry also plays a pivotal role throughits contribution to industrial output. employment generation, and the export earnings of the country. Currently, it contributes about 14 percent to industrial production, 4 percent to the GdP, and 16.63 percent to the country’s export earnings. It provides direct employment to over 35 million people, which includes a substantial number of SC / ST, and women. The Textiles sector is the second largest provider of employment after agriculture. Thus, the growth and all round development of this industry has a direct bearing on the improvement of the economy of the nation.

The Indian textiles industry is in a stronger position than it was in thelast six decades. The industry which was growing at 3-4 percent during the last six decades has now acceleratedto anannual growth rate of 9-10 percent and is expected to grow at a rate of 16 percent in value terms and will reach the level of US $ 115 billion (exports US $ 55 billion; domestic market US $ 60 billion) by 2012. The clothing and apparel sub-sectorare expected to grow at a rate of 16 percent in volume terms and 21 percent in value terms, and textiles exports are expected to grow at a rate of 22 percent in value terms, by 2012.

INCREASED INVESTMENT AND PLAN ALLOCATION

Investment in the textiles sector in the past three years increased from Rs. 11,628.00 crores in 2004-05 to Rs. 21,850.00 crores in 2005-06, and Rs. 31,000.00 in 2006-07. It is estimated that total investment in the textiles and clothing industry between financial years 2004-07 was around Rs. 64,478.00 crores. It is expected toreach Rs. 1,50,600 crores by 2012. This enhanced investment will generate 17.37 million jobs by 2012. This will comprise 12.02 million direct and 5.35 million indirect jobs.

In 2007-08, the plan allocation for Textiles has been enhanced by 66.27% over

that of 2006-07. The Ministry of Textiles is one of only two ministries that has seen such a high level of incremental budgetary support for its Annual Plan.

EXPORTS

The Indian textiles industry is an export intensive industry, and about one third of its total production is ixported in same form or the other. Through export friendly Government policies and positive efforts by the exporting community. textiles exports increased from US $ 12.45 billion in 2002-03 to US $ 17.85 billion in 2005-06, and are estimated at US $ 19.24 billion in 2006-07.

Exports of textiles and clothing, till 2004-05, had grown at a moderate pace. However, in 2005-06, they registered a sharp growth of 22%. This sharp rise export was due to the elimaination of trade quotas in the global textiles and clothing trade after over four decades of restrictions. w.e.f. January 1, 2005 (Post MFA) coupied with an increased flow of funds to augment capacities in the entire textile value chain, and favourable Government policies. Textiles exports are projected grow at a rate of 22% between 2007-2012 and will reach US $ 55 billion and attain a share of 7% in the global textiles trade by 2012.

APPAREL AND CLOTHING

The Clothing sector is an export intensive sub-sector and contributes about 40-45% to total textiles exports. It is a low investment and highly labour intensive industry: an investment of Rs. 1.00 lakh in the sub-sector creates 6-8 jobs.

The growth of the garment industry had been hamstrung by the reservation of garment manufacture for the small-scale industry. As a result, garment units could neither attain optimal economies of scale, nor produce international quality garments. Keeping in view the changed situation, the Government de-reserved the woven appreal sector in 2002-03, and the knit-wear sector in 2005-06.

The industry picked up momentum during the Xth Five Year Plan. It initially grew at 15-16 percent and, during 2005-06, the growth increased to about 20-22 percent. The catalyst for this accelerated growth rate was the end of the quota regime in the international market, growth in organized retailing, growing consumerism in the domestic market, and a favourable policy regime.

During the Xth Five Year Plan, exports of readymade garments increased at the annualized rate of growth of 13.72%. Major change was witnessed in 2005-06. when it increased by 28 percent.

The investment requirement of this sub-sector by 2012 will be Rs. 21.800.00 crores, and will create incremental employment for a 56.40 lakh workforce, of which 28.25 lakh will be semi-skilled, and 11.30 lakh un-skilled. Seeing employment and export potential in apparel and clothing sub-sector, the Government will give priorty to ensure its development and expansion. Efforts will be made to reform rigid labour Laws, and Brand promotion through the Public Private Partnership route. Fashion hubs will be set-up to provide Common Data, and marketing outlets to the industry.

TECHNOLOGY UPGRADATION

TECHNOLOGY UPGRADATION FUNDS SCHEME (TUFS)

The Indian Textiles Industry has, over the years, suffered from server technology obsolescence and lack of economies of scale, which in turn diluted its productvity,

quality and cost effectiveness, despite distinctive advantages in raw mateial, knowledge base, and skilled human resources.

Given the significance of textiles industry to the overall state of the Indian economy, its employment potential and the huge backlog of technology upgradation, it was felt that to sustain and improve its competitiveness and overall long term viability, it is essential that the textiles industry has access to timely and adequate capital, internationally comparable rates of interest.

To address the above problem

The Technology Upgradation Fund Scheme (TUFS) was launched on April 1, 1999, for five years, and was subsequently extended upto March 31, 2007. During its initial years, the progress of the scheme was moderate and it gained momentum from 2004-05 onwards. The scheme has been further extended till 2012. Thorugh, in the Xth Five Year Plan, Rs. 1,270.00 crores were allocated, the disbursal was Rs. 2,044.19 crores, which exceeded the plan target. From its inception till February 28, 2007, 8,595 applications were received involving, a project cost of Rs. 81,371 crores.

INFRASTRUCTURE

SCHEME FOR INTEGRATED TEXTILES PARK (SITP)

Though the Indian textiles industry has its inherent advantages, infrastructure bottlenecks are a prime area of concern. With a view to take advantage of the postMulti Fibre Arrangement (MFA) scenario, the Apparel Parks for Exports Scheme (APES) and the Textiles Centre Infrastructure Development Scheme (TCIDS) were launched in 2002 to provide world class export infrastructure at important textiles launched in 2002 to provide world class export infrastructure at important textiles centres. The objective of APES was to create exclusive export zones of apparel manufacturing. TCIDS was to modernize and fill in the gaps in the infrastructure at existing major textiles centres, to remove the impediments to production.

The performance of both Apparel Parks and TCIDS was restrained by the nature of assistance permitted. It was felt that there was a need to review both the schemes to examine the possibility for making provision for expeditious implementation of these schemes. Therefore, both the Schemes were merged into a new scheme Called the 'Scheme for Integrated Textile Park (SITP)' in 2005 to neutralize the weakness of fragmentation of various sub-sectors of the textilies and non-availability of quality infrastructure. These parks would incorporate facilities for spinning, sizing, texturing, weaving, processing, apparels and embellishments. This scheme is based on the Public Private Partnership (PPP) model.

During the Xth Five Year Plan, 30 projects were sanctioned: Andhra Pradesh (4). Gujarat (7), Maharashtra (6), Tamil Nadu (6), Rajasthan (4), Karnataka (1), Punjab (1) and West Bengal (1). These parks will be setup by 2008-09 with an additional investment of Rs. 15,434.60 crores. TheIntegrated Textile Park at Palladam. Tamil Nadu is nearing completion.

These parks will generate an annual production of Rs. 24,000.00 crores and will create more than half a million new jobs.

HUMAN RESOURCE DEVELOPMENT

Human Resourc Development (HRD) is one of the most critical inputs for industrieal organization. The integration of the world textilies market has intensific competition,

and in this scenario, to improve the market share in the international market and to face the onsisughts of imported textiles items, it is improtion address the issue of HRD. The basic idea is to use intellectual capital to the optinum to improve productivity and the quality of textiles products.

National Institute of Fashion Technology (NIFT)

NIFT was established by the Ministry of Textiles in 1986 as the apex body for HRD for the textiles, garment and allied sectors. NIFT has recently been given Statutory Status through an Act of Parliament for the promotion and development of education and research in Fashion Technology. This Act empowers the Institute to award degrees to its students passing out from 2007. Through the support of the Ministry of Textiles, the Institute has emerged as an Institution of Excellence in the area of fashion education in the country.

A new extension centre was inaugurated at Rae Bareli in Uttar Pradesh on February 13, 2007.

Sardar Vallabhhai Patel Institute of Textiles Management (SVPITM)

SVPITM was set-up December 24, 2002, as a National level Institute for Textiles Management at Coimbatore, Tamil Nadu, to prepare the Indian Textiles Industry to face the challenges of the post-MFA era, and enable it to establish itself as a leader in the global textiles trade. The Institute had started a Two year full time Post Graduate Diploma in Textiles Management (PGDTM). The Institute has intiated the process to get affiliation to the All India Council of Technical :Education (AICTE) and reorganization to its two years Post-Graduate Diploma in Textiles Management (PGDTM), equivalent to MBA. SVPITM has applied to Bharathiar University, Coimbatore to recognize the Institute as a Research Institute. The Institute entered into a MoU with the Entrepreneurship Development institute of India, Gujarat for the establishment of a center for conducting the Open Learning Diploma in Business Entrepreneurship (OLPE).

Apparel Training and Design Centres (ATDC)

The Apparel Industry employs approximately 5 million workers, of which approximately 2.5 million are employed in the export sector. Thirteen Apparel Training and Design Centres (ATDC) are being run by the Apparel Export Promotion Council (AEPC). ATDCs have trained over 21,000 workers since inception. AEPC plans to set up 25 new centres in 13 States, and 13 mobile centres during the XIth Five Year Plan. These additional facilities will onable ATDCs to train 57,625 trainess in addition to 30,000 students being trained by existing ATDCs. Further, 15,000 students would be trained through mobile centres.

Training needs by 2012

Garmenting will be the highest employment provider in the textiles sector. This has been acknowledged by the National Manufacturing Competitiveness Council (NMCC) and the planning Commission. this growth in employment opportunities will have to be under-pnned by education and training at vocational institutes for aimost six million trained workers.

In the Five Year Plan direct incremental employment opoortunities will be created for a 6.5 million work force in spining, weaving, knitting, processing and garmenting.

One of the critical factorws which would impact adversely on the growth process of the textilies industry is the inadequacy of training facilities in the country. The output of trainees from the existing training institutions will not be adequate to meet the projected requirement.

It was in this perspective that the Government set-up a Committee in April 2006 to exmine the status of the existing educational and training infrastructure in the public and private sectors and to explore the directions and opportunities in the human resources segment of the textiles sector.

The Committee submitted its report in July 2006. It identified the garmenting sector as the single most important sector. ThePublic-Private Partnership (PPP) model will be adopted for vocational education, which will include the ITIs in its ambit, in addition to ixisting insititutiionsin the textiles sector, run by the Ministry of Textiles and related Organizations, both Public and Private.

The Committee suggested that these insititutions should be set up in ‘‘catchment areas’’ from where workers for the textiles sector have traditionally been drawn. It recommended the ‘‘mapping’’ of ITIs to identify those located near existing clusters of the textiles industry, and stressed that they be upgradeed to meet the training needs of these clusters.

RAW MATERIAL

COTTON

Cotton is the major raw material for the domestic textiles industry. It plays a role in the country’s economy by providing substantial employment opportunites and contributes signficantly to the country’s export eamings. In 2005-06. the ratio of the use of cotton to man-made fibre and man-made filament yarn by the textiles Industry was 62:38.

Due to focused support to cotton growers, cotton production reached arecord high of 244 lakh bales (170 lakh bales in the cotton season of 2006-07. Productvity increased from 399 kg / hectare in the cotton season of 2003-04 to 501 kg / hectare in the cotton season 2006-07.

During the cotton season of 2006-07, Punjab achieved the highest productivity of 752.00 kg / hectare followed by Gujarat at 662 kg / hectare. Tamil Nadu stood third at 639.00 kg. / hectare. The world average yield projected to rise at rise at 743 kg / hectare as against 729 kg. / hectare during 2005-06.

The Technology Mission Cotton (TMC)

The Government implemented vigorously, in a time-bound manner, the Technology Mission on Cotton (TMC), launched in February 2000, toimprove its qualitiy and preductivty reduse the needed competie advantage to the textiles industry. Another objective was also to ensure attractive returns tothe farmers.:The TMC comprises four Mini-missions.

1) Mini-mission I - Strengthening of Research & Development of high yield and hybrid verities.
2) Mini-mission II - Transfer of Technology tofarmers.
3) Mini-mission III - Improvement of Marketing Infrastructure.
4) Mini-mission IV - Modernisation / Upgradation of Ginning and Pressing Factories.

The Ministry of Agriculture is the nodal Ministry for implementation of Mini-missions I and II, and the Ministry of Textiles is the nodal Ministry for implementation of Minimissions III and IV.

Progress till June 2007

Mini-Mission - III

Development of 229 market yards (including new market yards and also improvement of existing ones) was sanctioned.

112 market yards were completed at an estimated cost of Rs. 452.27 crores. The share of the Government of India was Rs. 230.85 crores.

Mini-Mission - IV

The Technology Mission on Cotton has contributed to an increase in productivity, and reduced the contamination of cotton. 90% of the targets for MM-III and IV under TMC in the XthFive Year Plan, for which Ministry of Textiles is responsible, were achieved. Against the target of 250 market yards, 229 market yards were sanctioned by June 30, 2007. Similarly, against the target of 1,000 Ginning & Pressing (G & P) units, 905 projects were sanctioned, out of which 563 factories were completed byJune 30, 2007. Due tothe measures initialted by the Government the country which was dependent on imported cotton has become net exporter of cotton from 2005-06, Government have decided to extend Mini M<issions III and IV of TMC till March 31, 2009.

THE SERICULTURE AND SILK TEXTILES INDUSTRY

Globally India isthe second largest producer of silk and contriutes about 18% to the total world raw silk production. India has the unique distinction of being endowed withall the four varieties of silk, namely, Mulberry, Eri, Tasar, and Muga. It isone ofthe most labour intensive sectors, combining activities both agriculture (sericulture) and industry. The production process involves a long chain of inter-dependent, specialized operations which provide a means of livelihood to a large section of the population, i.e., silkworm seed producers, farmers-cum-rearers, reelers, twisters, weavers, spinners ofsilk Silk is a highly remunerative cash crop, with minimum investment but rich dividends, and is the onlycash crop which provides sustained returns through out the year. The sericulture sector provides employment to about 6 million people, mainly in rural areas.

The Government of India (GOI) has concurrent responsibility for the development ofthe Silk industry in the country, which it fulfills mainly through the Central Silk Board (CSB), a statutory body, consitituted under the Central Silk Board Act, 1948.

The role of State Governments in sericulture development has customarily been the expeansion of sericulture activity, and the provision of farmer-level extension and other support services, including crdit factilitation.

CSB implements the Catalytic Development Programme (CDP) in the silk producting States which provides support and incentives for the production of quality cocoons and raw silk. Support and incentives are provided mainly to small & marginal farmers and small entrepreneours, under bothon-farm and off-farm activities, in mulberry and non-mulberry sectors, Most CDP schemes areimplemented jointly by CSB and the Sericulture Departments of the State Governments, and also through the cluster approach / SGSY programme of the

Ministry of Rural Development. Generally, State Sericulture Departments are the major implementing agencies for the CDP.

During 2006-07, the production of raw silk was 18,760 mt. against a demand ofa around 26,000 mt. and exports amounted to Rs. 3,200.00 crores. The export basket consists ofnatural Silk Yarn, Fabrics, Made-ups, Readymade Garments, Silk Carpets, and Silk Waste. The total Silk production during 2005-06 was 17,305 ct. and exports were Rs. 3,158.16 crores.

The Silk Mark Scheme was launched for the brand promotion of Silk. The Central Silk Board (Amendment) Act, 2006 was enacted togegulate the quality of Silk-worm seeds, and came into force w.e.f. Septemeber 14, 2006. The Government has proposed an outlay of Rs. 1,817.87 crores to implement plan schemes during the XIth Five Year Plan.

THE JUTE AND JUTE TEXTILES INDUSTRY

The Jute industry occupies an important place in the national economy. It is one of the major industries in the eastern region, particularly in West Bengal Jute, **the golden fibre,** meets all the standards for ‘safe’ packaging in view of being a natural, renewable, biodegradable and eco-friendly product.

Globally, India is the largest producer and second largest exporter of jute goods and this sector supports the livelihood of about 40 lakh farm families, andprovides direct and indirect employment to 4 lakh workers. There are 78 Jute mills in the country. Of these 61 are in West Bengal, 3 each in Bihar and Uttar Pradesh, 7 in Andhra Pradesh, and one eachin Assam, Orissa, Tripura and Chattisgarh. Annually, the export of Jute Products ranges between Rs. 1100-1200.00 crores.

The production of raw Jute varies between 90-100 lakh baies (180 kg. each), and the domestic consumption of jute goods is in the range of 13.5 - 14.5 lakh MT. The ratio of domestic consumption to exports is 80.20. The production of jute is concentrated in 36 disricts of West Bengal, Orissa, Bihar, Assam, Meghalaya, Tripura and Andhra Pradesh. In the 2006-07 jute season (july-June), the production of raw jute was 90 lakh bales (180 kgs. each), and is expected tobe 100 lakh bales in 2007-08.

The Government on June 2, 2006, approved the implementation of the Jute Technology Mission (JTM) at an estimated cost of Rs. 355.55 crores, of which the outlay for mini missions III and IV will be Rs. 38.60 and Rs. 260.00 crores respectively. The Department of Agricultural Research & Education, Ministry of Agriculture, launched the Mini Mission I of the Jute Technology Mission Ministry of Agriculture, launched Mini Mission II of JTM on Decemeber 21, 2006. Mini Mission III and IV were launched by the Ministry of Textiles on February 6, 2007.

The Government has announced the first National Jute Policy on April 15, 2005, and as envisagedin the Policy, the Government of June 2, 2006, approved the implementation of the Jute Technology Mission (JTM) at an estimated cost of Rs. 355.55 crores. JTM also comprise four Mini-missions.

1) Mini-mission I - Strengthening of Research & Development

2) Mini-mission II - Transfer of technology

3) Mini-mission III - Development of Marketing Infrastructure

4) Mini-mission IV - Modernisation / Upgradationof Technology of Jute Sector, and initiationof activities for prosotion of Jute Diveresfied Products.

The Ministry of Agriculture is the nodal ministry for implementation of Mini-missions I and II, and the Ministry of Textiles is the nodal Ministry for implementation of Mini mission III and IV.

THE WOOL AND WOOLLEN TEXTILES INDUSTRY

Thewoollen textiles industry is a rural based, export oriented industry in which the organized sector, the decentralized sector, and the rural sector complement each other. This industry provides employment to 27 lakh workers in a wide spectrum of activities. The country is the seventh largest producer of wool andcontributes 1.8% estimated at 57.20 mn.kg. in 2006-07. It was 55.00 mn.kg. in 2005-06. of the total production of raw wool, 5% is apparel grade, 85% carpet grade, and10% coarse grade. Domestic produce is not adequate, therefore, the industryisdependent on improted raw material. Wool is the only natural fibre in which the country is deficient. Exports, excluding hand knotted carpets, rugs,durries, etc. were Rs. 2,098.27 crores in 2005-06, andi is estimated that it will rise to Rs. 2,360.55 crores in 2006-07

A small quantity of specialty fibre is otained from Pashmina goats and Angora rabbits. :There are 718 woollen units in the country, the majority of which are in the small scale sector. Governments is implementing the Integrated Wool Improvement Programme (WIP0 for the growth and development of the wool and woollen industry in the country. There are two components of the programme. viz., (i) improvement of wool fibre and (ii), quality processingof wool. The programme is being adminisered by the Central Wool Development Board (CWDB), Jodhpur, through State Government Organizations / NGOs.

DECENTRALIZED POWERLOOMS INDUSTRY

The Decentralised Powerlooms sector is one of the most important segments ofthe textiles industry, as it provides employment to 49.05 lakh workers and contributes 62% to total cloth production in the country. More than 60% of the fabric meant for export is sourced from powerlooms sector. The ready-made garments and home textiles sectors are heavily deended on thepowerlooms sector tomeet their fabric requirement.

Considering the problem ofliquidity in thepowerlooms sub-sector, an optionof 20 percent Credit Linked Capital Subsidy (CLCS) was provided tothe powerlooms sector fromNovember 2003 under the technology Uppgradation Fund Scheme. The subsidy for this works out to Rs. 29.01 crores. The Government has targeted at 94.60 billion sq mtr of clothproduction by 2012. The contribution of powerlooms sector will be 58 billion sq. mtr. as against estimatedproduction of 33 billion sq. mtr. in 2006-07.

RESEARCH AND DEVELOPMENT

There are eight Textiles Research Associations (TRAs), the Ahmedabad Textiles Industry Research Association (ATIRA), the BombayTextiles Industry Research Association (BTIRA), the South India textiles Industry Research Association (SITRA) and the Northern India Textiles Industry Research Association (NITRA) carry out consuitancy, testing, training and research and development in cotton and cotton / synthetic as well as cotton / natural fibre blends. The Man-made Textiles industry Research Association (MANTRA), and the Synthetic & Art Silk Mills Research Assqciation (SASMIRA) work predominantlyin synthetics. The Wool Research Association (WRA), and the India Jute Industry's Research Association (IJIRA) carry out work in wool and jute, respectively.

The Textiles Committee's and market research needs of the industry. TRAs are industry promoted bodies and work in a wide range of fibre / technology, areas for product development, process improvement, testing, consultancy and address training needs of the industry. The policy initiatives of the Governement of India support innovation. investment in R&D, and the generic research programmes of TRAs, and encourage industry to support the TRAs to cater to their technological needs.

The Government recognizes that innovationis the key to survivalin the globalized world. Continuous innovation in technology, machinery, products and processes is necessary for the industry to fully exploit the opportunities available in the world market. The R&D approach needs to be changed from passive to procactive.

To achieve the above objective, the Government during XIth Five Year Plan, will adequately support TRAs and continue R&D assistance to identifies projects. Technology is changing fast and equipment is becoming obsolete at a faster pace. :To cope-up with such changes, facilities and laboratories of the TRAs will beupgraded.The Government will set up a Resource Bank for technological database, technology forecasting and mangement practices.

HANDLOOMS

Handilooms play a veryimportant role in the country's economy and provide direct or indirect employment to about 6.5 millionpeople. Today, while the sector faces competition frompowerlooms and the textile mills, and is constrained by its continued dependence on the co-operative delivery machinary, effective state interventionin the form of market anddidsign support, as well as other developmental welfare schemes have helped it to with stand competition.The Government of India has also ensured the availability of raw-material to handlooms weavers through the Hank Yarn Obligation Order.

The production of fabric bythis decentralized sub-sector has been on the upswing. The production, which was 5,493 mn. sq. mtrs. in 2003-04, increased to 5.722 mn. sq. mtrs. in 2004-05. It futher increased to 6,108 mn. sq. mtrs. in 2005-06 and in 2006-07, the production was 6,520 million sq. mtrs.

For the first time a cluster approachwas introduced in 2005-06 for the comprehensive and holstic development of selected handlooms clusters with loomage of 5000 or above and 20 handlooms clusters have been taken up During 2005-06, additional 100 clusters were identified with the loomage between 300-500. Diagnostic study of these 100 clusters have been carried out. During 2007-08, 100-150 additional handlooms clusters will be taken up fordevelopment.

The welfare of weavers has been a cherished goalof the Government for the welfare of weavers in the handlooms sub-sector, the Mahatma Gandhi Bunkar Bima weavers were covered under the scheme from October 2005 to March 2007. Similarly, the Health Insurance Scheme was alsolaunched in 2005 to provide health insurance coverage tothe weaver, his / her spouse and two children. 6.98 lakh weaversd were covered under the scheme from October 2005 to March 2007.

Handloom Mark

The **Handloom Mark** was launched on June 28, 2006, by the Hon'ble Prime Minister, Dr Manmohan Singh, togive adistinctive brand identity to handlooms products.

Till June 2007, 33.30 lakh Handlooms Marklables have been aold and 1,780 beneficiaries have been registered.

HANDICRAFTS

handicrafts represent the rich and diverse cultural heritage of the country. Their cultural importance pertains to ensuring the preservation of heritage, traditional skills and talent. Their economic importance lies in their high employment potential, low capitalinvestment, high value addition, and potentialfor export/foreign exchange earnings.

The Sector provides eimployment toanestimated 65.00 lakhs artisans, of which 47.42% are female; 24.73% belong to Scheduled Castes, and 12.38% to Scheduled Tribes.

Exports of Handicrafts andhand-made carpets has increased from Rs. 17,608.91 crores (US$ 4.98 billion) in 2005-06 to Rs. 20,96300 crores (US$ 4.61 billion) in 2006-07. India is the world leader in carpet exports with 36% of the global market share. Exports of carpet increased from Rs. 2,583.62 crores in 2004-05 to Rs, 3,082.06 in 2005-06, and were Rs. 3,674 crores in 2006-07.

The Rajiv Gandhi Shilpi Swasthya Bima Yojana was introduced to provide health insurance coverage to artisans and their families. Beneficiaries can be between the age group of 1 day to 80 years.

CENTRAL PUBLIC SECTOR ENTERPRISES

At the time of Independence, the Indian economy was basically agrarian with a weak industrial base, low level of saving and investment and near absence of infrastructure facilities. This was due to poor planning by the alien rulers in the industrial sector. It was obvious that if the country was to speed up its economic growth and maintain it in the long run at a steady level, a big push was required. As such, State's intervention in all sectors of the economy was inevitable.

There has been an appreciable growth in the investment in the public sector over the years. The investment of Rs. 29 crore in five CPSEs in 1951 increased to Rs. 349994 crore in 242 enterprises as on 31 March 2004 and further to Rs. 357849 crore in 237 enterprises as on 31 march 2005. During 2004-05 investment in public sector was increased by Rs. 7855 crore over the year 2003-04 registering an increase of 2.24 per cent. The internal resources generated by the public sector enterprises, during 2004-05 were amounting to Rs. 83854 crore. The PSEs have also been making substantial contribution to augment the resources of Central Government through payment of dividend, interest, corporate taxes, excise duties, etc. During 2004-05, contribution to the Central Exchequer by the CPSEs through these resources amounted to Rs. 110599 crore. The contribution of CPSEs during 2004-05 in country's total production of Coal was about 94 per cent, in Lignite about 71.09 per cent and in petroleum about 80 per cent.

Besides providing direct employment to about 1.69 million people as on 1 March 2005 the PSEs incurred gross expenditure amounting to Rs. 3098 crore on township maintenance, administration and social overheads.

The Government of India announced on 24 July 1991 a statement of Industrial Policy inter-alia to improve the performance and portfolio of Public Sector Enterprises. The performance of CPSEs has improved significantly since 1991-92 and has shown continuous growth. Performance of CPSEs from 1991-92 to 2004-05 in some of the important financial parameters is given in table below:

TABLE 18.1 : PERFORMANCE OF CENTRAL PUBLIC SECTOR ENTERPRISES

(Rs in crore)

Year	No. of operating CPSEs	Turnover / Operating Income	PBIT	Net Profit	Prov. for Tax	Dividend Payment	Contribution to Central Exchequer	Gross Internal Resource Generation
1991-92	237	1,33,906	13,675	2,356	1,647	687	19,951	12,943
1992-93	239	1,47,266	15,957	3,271	1,805	792	22,449	14,792
1993-94	240	1,58,049	18,556	4,545	2,110	1,028	22,988	16,676
1994-95	241	1,87,355	22,630	7,187	2,581	1,436	27,472	19,992
1995-96	239	2,26,919	27,587	9,574	4,047	2,205	30,878	24,198
1996-97	236	2,60,735	30,915	10,186	5,192	2,836	39,009	25,554
1997-98	236	2,76,002	37,206	13,582	5,634	3,609	42,289	31,192
1998-99	235	3,10,179	39,727	13,203	6,499	4,932	46,934	31,302
1999-2000	232	3,89,199	42,270	14,331	7,706	5,455	56,157	35,933
2000-01	234	4,58,237	48,767	15,653	9,314	8,260	61,037	37,811
2001-02	231	4,47,529	63,190	25,978	12,255	8,068	62,866	52,544
2002-03	227	5,35,165	73,374	32,399	17,432	13,768	81,867	54,273
2003-04	230	5,87,052	99,053	53,084	22,134	15,288	89,035	75,409
2004-05	227	7,00,862	1,09,518	65,429	21,661	20,714	1,10,599	83,854
Growth in 2004-05 over 2003-04	(-)1.30	19.39	10.57	32.26	(-)2.14	35.49	24.22	11.20
and over 1991-92 (per cent)	(-)4.41	423.40	700.86	2677.12	1215.18	2915.14	454.35	547.87

Source : Public Enterprise Survey, 2004-05 and earlier issues

The improvement after liberalisation is not only in absolute terms but also in important financial ratios. The return on investment, i.e., profit before interest and tax to capital employed has gone up from 11.6 per cent in 1991-92 to 21.49 per cent in 2004-05 and dividend payout from 29.2 per cent to 31.66 per cent during the same period.

In July 1997, the Government had identified 9 Central Public Sector Enterprises as Navratnas. These enterprises had comparative advantage and potential to emerge as global giants. The Navratna PSEs at present are BHEL, BPCL, GAIL, HPCL, IOC, MTNL, NTPC, ONGC and SAIL. These PSEs have been given enhanced autonomy and delegation of powers to incur capital expenditure, to enter into technology joint ventures / strategic alliances, to effect organisational restructuring, to create and wind up below Board level posts, to raise capital from domestic and international market, to establish financial joint ventures and to wholly owned subsidiaries, etc.

In October 1977, the Government had also decided to grant enhanced autonomy and delegation of financial powers to some other profit making companies subject to certain eligibility conditions and guidelines to make them efficient and competitive. These companies, called Miniratnas, are in two categories, namely, Category-I and Category-II. The criteria for conferring the Miniratna status are : (i) PSE should be profit making for the last 3 years continuously and should have positive net worth, (ii) it should not have defaulted in repayment of loans / interest

payment on loans due to government, (iii) it should not depend upon budgetary support or Government guarantee (Government guarantee required under the standard stipulations of external donor agencies will not affect the Miniratna status); and (iv) restructuring of the Board of Directors by inducting non-official Directors.

PSEs which have made pre-tax profit of Rs. 30 crore or more in at least one of the 3 years are given Category I status while others are given Category II status. The administrative Ministries are empowered to declare a PSE as a Miniratna if it fulfils the eligibility conditions. Presently there are 45 Miniratna PsEs (30 Category I and 15 Category II).

The enhanced powers delegated to the Boards of Miniratna PSEs included power to incur capital expenditure, to establish joint ventures and subsidiaries in India, to enter into technology joint ventures / strategic alliances and obtain technology and know-how by purchase or other arrangements. The exercise of these powers is subject to various conditions and guidelines laid down for this purpose including restructuring of the Board of Directors by inducting non-official Directors.

Keeping in view the pledge made in the National Common Minimum Programme (NCMP) that full managerial and commercial autonomy will be devolved to successful profit making companies operating in a competitive environment, the Government have reviewed the powers delegated to the Board of Directors of Navratna, Miniratna and other profit making PSEs and have enhanced the delegated powers in August 2005. Other profit making PSEs, i.e., those which have shown a profit in each of the 3 preceding accounting years and have a positive net worth, have also been delegated enhanced powers.

The National Common Minimum Programme stipulates that the Government is committed for a strong and efficient public sector. While every effort will be made to modernise and restructure sick public sector companies and revive sick industry, chronically loss-making companies will either be sold-off, or closed, after all workers have got their legitimate dues and compensation. Private industry will be inducted to turn-around companies, which have potential for revival.

It is the constant endeavor of the Government to revive / restructure the PSEs in order to improve their performance, productivity and profitability. Major emphasis had been on the sick and loss making enterprises, which are capable of being revived. The sick industrial enterprises are referred to board for Industrial and Financial reconstruction (BIFR) under the provision of Sick Industrial Companies (Special Provision) Act, 1985 for formulating appropriate revival / rehabilitation packages. As for other loss making enterprises, administrative Ministries / Departments in consultation with management, workers and other expert / consultants take appropriate measures for restructuring these units.

The Government has set up a Board for Reconstruction of Public Sector Enterprises (BRPSE), which inter-alia considers and advises the Government on the proposals of restructuring / revival of sick and loss making CPSE, including cases where disinvestment or closure or sale are justified. The concerned administrative Ministries / Departments prepare appropriate proposals in this regard and submit to BRPSE for consideration. BRPSE has made recommendations in respect of 31 CPSEs so far and out of them the Government has approved revival plans of 15 cases till 30 March 2006.

In July 2005 the Government extended the Purchase Preference Policy (PPP) for products and services of CPSEs till 31 March 2008 with a sun-set clause that it

will be terminated w.e.f. 31 march 2008. As per this policy if the price quoted by a CPSE is within 10 per cent of the lowest valid bid price, i.e., L1, the purchase preference will be granted to that CPSE at L1 price. The policy is applicable to tenders of Rs. 5 crore and above but not exceeding Rs. 100 crore. 20 per cent value addition Ministries / Departments are to prepare a list of such CPSEs, which need purchase preference support or a negative list of CPSEs which do not need purchase preference support. The PPP aims at to enable the CPSEs to utilise their created capacities to the fullest extent. It helps the sick and loss making CPSEs to improve their performance by ensuring adequate order booking.

In the process of restructuring of the sick and loss making enterprises and to improve the performance of profit making enterprises, emphasis has been laid on rationalisation of Manpower in the Central PSEs. In the years 2000 and 2001, the Government liberalised the Voluntary Retirement Scheme (VRS) for the employees of CPSEs to enable the CPSEs to rationalise their manpower. Cumulatively around 5.55 lakh employees have opted for Voluntary Retirement from CPSEs since October 1988 till March 2005. As a safety net for separated employees of CPSEs, a scheme for Counseling, Retraining and Redeployment (CRR) is under implementation of DPE from 2001-02. The scheme aims at rehabilitation of the rationalised employees through short duration training programmes of 20 / 30 / 40 days.

In order to achieve better performance and make attempts to bring a proper balance between accountability and autonomy the Government has introduced the concept Memorandum of Understanding (MOU) in 1988. The MOU established the relationship and targets of the Public Sector Enterprises with their respective administrative Ministries. During 1987-88 only 4 CPSEs signed MOU which has gone up to 102 CPSEs in 2005-06 and 108 in 2006-07. The MOU signing CPSEs are rated in 5 categories, i.e., 'Excellent' 'Very Good' 'Good' 'fair' and 'Poor' as per their audited results. As per evaluation of 99 CPSEs which signed MOU for 2004-05, 44 CPSEs have been rated excellent, 33 CPSEs very good, 11 CPSEs good, 10 CPSEs fair and only one CPSE was rated poor.

The Government have set up a Permanent Machinery of Arbitration (PMA) to resolve commercial disputes, except taxation, between PSEs inter-se as well as between a PSE and a Central Government Department / Ministry. The disputes are required to be referred to the Department of Public Enterprises for its reference to the Arbitrator of PMA. No lawyer is allowed to appear on behalf of either parties for presenting / defending the case.

HEAVY ELECTRICAL INDUSTRY

Heavy Electrical Industry covers power generation, transmission & distribution and Power equipment. These include turbo generations, boilers, various types of turbines, transformers, switch gears and other allied items. The demand for power generation equipment depends upon power development programme / generation targets. The target for additional power generation during the Eleventh Plan Period is 78,530 MW. New power plants, to be setup, will generate substantial demand for heavy electrical equipment.

It may be mentioned that major portion of the equipment, sucessfully in operation in the power sector, has been produced, installed and commissioned by theIndian electrical Industry, Electrical equipments such as transformers switchears etc. are used by all sectors of the Indian Economy. Some major areas where these are used are the multi crore projects for power generation including nuclear power

stations, petrochemical complexes, chemical plants, integrated steel plants, non-ferrous metal units etc.

A strong manufacturing base has already been established for heavy electrical equipment and existing installed capacity of the industry is of the order of 7086 MW of thermal, 2500 MW of Hydro andabout 829 MW of Gas based power generation aquipment per annum. The Indian Heavy Electrical industry is also capable of manufacture and supply of equipment required for seeting up nuclear power plants. The present share of the Indian Industry is about 66% in the country's power generation capacity.

The Heavy Electrical Industry is capable of manufacturing transmission and distribution equipment to 765 KV AC and high voltage DC. The industry has taken up the work of up gradation of transmission to the next higher voltage system of 800 KV and has upgraded its manufacturing facilities to supply 800 KV class transformers, reactors, CTS, CVT, hushing and insulators etc. Large electrical equipment use din Steel plants, petrochemical complexes and other such heavy industries are also being manufactured in the country.

The domestic Heavy Electrical equipment manufacturers are making use of the developments in the global market with respect to product designs and upgrading of manufacturing and testing facilities and are now capable of taking up turnkey contracts both in India and abroad. Technology Transfer isallowed in this core sector of industry with 100% FDI.

AUTOMOBILE INDUSTRY

1. Current Industrial Policy

Automobile Industry was delicensed in July 1991 with the announcement of the New Industrial Policy. The passenger car was however delicensed in 1993. No industrial licence is required for setting up of any unit formanufacture of automobiles except in some special cases. The norms for Foreign Investment and import of technology have also been progressively liberalized over the years for manufacture of vehicles including passenger cars in order to make this sector globally competitive. At present 100% Foreign direct Investment (FDI) is permissible under automatic route in this sector. The import of technology / technological up gradation on the royalty payment of 5% without any duration limit and lump sum payment of USD 2 million is also allowed under automatic route in this sector. The liberalisation of restrictions has helped the sector to restructure itself, absorb newer technologies, align itself to the global developments and realize its full potential.

2. EXIM Policy

With the removal of quantitative restrictions (QRs) witheffect from 1.4.2001, the import of vehicle is allowed freely subject to certain conditions notified by DGFT. This dispensation is also applicable for passenger car segment. Further, in order to ensure that India does not become a dumping ground for ol and used vehicles produced abroad, the custom duty on import of second hand vehicles including passenger cars is levied at 100%. The custom duty on new Completely Built Units (CBUs) has been maintained at a level of 60%. As a result, the manufacturing of vehicles has been encouraged insteadof imports.

3. **Current Status of Indian sutomobile industry and passenger car sector :**

3.1 Major Players : With the gradual liberalization of the automobile sector since

1991, the number of manufacturers in India has grown progressively. At present there are 17 manufacturers of passenger cars multi utility vehicles, 9 manufacturers of commercial vehicles, 16 of two & three wheelers and 14 of tractors, besides 5 manufacturers of engines. The industry had an estimated investment ofnearly Rs. 70,000 crores in 2006-2007 which is slated to go up to Rs. 80,000 crore by the year 2007. During the year 2006-2007, the turnover of the automotive sector is estimated to exceed Rs. 206,000 crores. In passenger car segment, Maruti still holds the number one position followed by Hyundai and Tata Motors. The industry also offers substantial scope of employment with direct employment of 4.5 lakhs and about one crore indirect employment.

3.2 Installed Capacity, Production and Sale

3.2.1 Installed capacity : The automobile industry including passenger cars, over a period of time and particularly after liberalisation, has installed a robust capacity. The installed capacity in four wheelers and two & three wheelers was 15.90 lakh and 79.50 lakh respectively in 2004-05.

3.2.2 Production : The production of all categories of vehicles during the last 6 years is given below :

Production (in nos.)

Category	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Four Wheelers	832,227	927.027	1,264,600	1,563,579	1,700,383	2,064,850
Two & Three Wheelers	4,484,075	5,352,940	5,978,964	6,904,274	8,043,120	9,000,292
Total	5,316,302	6,279,967	7,243,564	8,467,853	9,743,503	11,065,142

Source : SIAM

3.2.3 Sale of vehicles : The sale of all categories of vehicles during the last 6 years and for the current year is given below :

Domestic Sales (in nos.)

Category	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Four Wheelers	821,787	897,880	1,162,210	1,380,002	1,494,117	1,847,580
Two & Three Wheelers	4,404,001	5,043,655	5,648,327	6,517,627	7,412,311	8,261,457
Total	5,225,788	5,941,535	6,810,537	7,897,629	8,906,428	10,109,037

Source : SIAM

4. Growth of the Industry

With liberalization coupled with arrival of new and contemporary models, stimulated the demand for vehicles in the market leading to robust growth of the industry including the passenger car sector during the initial periods. The auto industry as a whole achieved a cumulative annual growth rate (CAGR) of 16% between 1992-97. This has led to an increase in its contribution to industrial output from 4.3% in 92-93 to 5.4% by 96-97. The passenger car sector also during 1992-97 at

around the same rate of growth. However, since 1997-98 the industry could not maintain the same pace of growth, In fact, there was a negative growth in some segments owing to various reasons, including global economic slowdown and slow growth of agricultural sector. However, the industry has again picked up and since 1999-2000, the sector has performed steadily.

The automobile sector over the last five years is growing at 14%. In 2006-07, the domestic sales grew at 13.5%, with commercial vehicles,passenger vehicles, three wheelers and two wheelers growing at 33%, 21%, 12% and 11% respectively. The volume of the Auto Industry as a percentage of GDP has risen to 5.5% in 2006-07.

5. Export of Vehicles

Automotive industry of India is now finding increasing recognition worldwide. While a beginning has been made in exports of vehicles, the potential in this area still remains to be fully tapped. Significantly, during the last few years, the export in this sector has grown owing mainly to the export of cars and two / three wheelers. The sector grew at a rate of 40% over last five years. The table below indicates the performance during last 6 years :

Export in nos.

Category	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Four Wheelers	65,035	84,260	146,723	196,342	216,172	248,244
Two & Three Wheelers	119,645	223,048	333,196	433,202	590,050	763,034
Total	184,680	307,308	479,919	629,544	806,222	1,011,278

Source : SIAM

RECENT GOVERNMENT INITIATIVES

The key challenge, however, is to maintain the growth levels and to enhance our global presence, make 'Made in India' brand a reality and develop the ability to achieve in a 'no protection environment'. In order torealise the growth potential of Indian automotive Industry both domestically and globally and to optimize its contribution to the national economy, the Department of Heavy Industry has prepared a 10 year Mission Plan for the development of theIndian Automotive Sector and creation of a global automotive hub.

AUTOMOTIVE MISSION PLAN 2006-2016

Hon'ble Prime Minister, Dr Manmohan Singh launched "Automotive Mission Plan 2006-2016" (AMP 2006-2016) prepared by the Ministry of Heavy Industries & Public Enterprises in January 2007. The AMP 2006-2016 is the outcome of an intensive consultation process with all the stake holders including the industry, academia and various Ministries / Departments of the Government.

The Vision of the Mission Plan is to make India **"emerge as the destination of choice in the world for design and manufacture of automobiles and auto components with output reaching a level of US$ 145 billion accounting for more than 10% of the GDP and providing additional employment to 25 million people by 2016".**

The Mission Plan has identified various interventions / prescriptions to promote investment, exports, domestic demand, human resource development, labour reforms and for creating R&D) infrastructure in the country, at both the industry as well as the Government level, to achieve the milestones / targets laid down in the AMP 2006-2016. It also seeks to remove the infrastructural impediments which inhibit growth of the industry and to put in place the required infrastructure well in advance to facilitate growth of the sector. The suggested recommendations in the AMP interalia includes promotion of manufacture and export of small cars, MUVs, two wheelers, tractors and components, to follow an appropriate policies conducive for investment and export, setting up of institutional and infrastructural support facilities to promote R&D, human resource development and to coordinate safety and emission regulations.

Another significant initiative of the Government to put Indian Auto Industry on the global map has been the initiation of the national Automotive Testing & R&D Infrastructure Project **(NATRIP) at total cost of Rs. 1718 Crore.**

The project principally aims to (i) create critically needed automotive testing infrastructure to enable the Government in ushering in global vehicular safety, emission and performance standards, (ii) deepen manufacturing in India, promote larger value addition and facilitate convergence of India's strengths in IT and electronics with automotive engineering, (iii) enhance India's abysmally low global outreach in this sector by de-bottlenecking exports and (iv) remove the most significant obstacle in the growth path of one of the largest industries of India, i.e. the automotive industry which exists in the form of a crippling absence of basic product testing, validation anddevelopment infrastructure.

The project envisages setting up of three world class test centers and a proving ground in the country. With setting up these facilities, the Government would be able to create an outstanding pre-competitive R&D infrastructure in South Asia for the fast growing auto sector. It is expected that this would help the sector in realizing its full growth and export potentials.

CENTRAL PUBLIC SECTOR ENTERPRISES (CPSEs)

At the time of Independence, the Indian economy was basically agrarian with a weak industrial base, low level of saving and investment. With a view to address the large scalepoverty in the country through higher economic growth, the Government embarked upon the Five Year Plans for raising resources and for making investment in the economy. Public sector investment in our Plan models was, moreover, assumed to bridge the gap between the required investment in the different sector and the investment forthcoming from the private sector. CPSEs have been the result of Plan process as mandated under the Five Year Plans. The CPSEs, in turn, have been established primarily in areas that are delineated under the central (or the Concurrent) List of the Constitution of India.

Investments in CPSEs

On the eve of the First Five Year Plan there were 5 CPSEs with a total investment of Rs. 29 crore. Both the number of enterprises and the total investment in CPSEs saw an overwhelming increase over the years. On 31st March, 2006, there were as many 239 CPSEs (excluding 6 Insurance Companies and 6 newly set up CPSEs) with a total investment of Rs. 3,93,057 crore.

Contribution to the Government

The CPSEs have been making substantial contribution to the Central Government through payment of dividend, interest, corporate taxes, excise duties etc. During 2005-06 contribution to the Central Exchequer by the CPSEs through these avenues amounted to Rs. 125384 crore. The major share of this contribution was by way of payment of taxes & duties (84.42%) followed by dividend (15.47%) and interest (0.11%). At the same time the internal resources generated by the public sector enterprises, during 2005-06 amounted to Rs. 85050 crore. This was over and above the factor payments on account of salary and wages.

Share in GDP

The share of CPSEs in GDP (at market Price) stood at 11.12 per cent in 2005-06. While the share of 'taxes & duties' in net value addition by CPSEs, during 2005-06 was the highest at 46 per cent in 2005-06, the share of net profit, & wages and interest stood at 26%, 19% and 9% respectively.

CPSEs are moreover, engaged in the production and supply of a wide range of products and services. These include basic goods like steel, cement and chemicals; capital goods like pressure vessels, boilers and drilling rigs; and intermediate goods like electricity and gas. They also render a large number of services, such as, telecommunications, trading, tourism, warehousing etc.

Employment in CPSEs

As on 31.3.2006, the 239 CPSEs employed over 16.49 lakh people excluding casual workers. Government initiated a voluntary retirement scheme in public sector enterprises during 1988 to help them shed excess manpower and to improve the age-mix and the skill-mix. Simultaneously, their training and re-training programmes are also being given substantial uplift to bring about over all improvement in per capita productivity.

The macro view of performance of CPSE during the last ten years is as under-

MACRO VEIW OF CENTRAL PUBLIC SECTOR ENTERPRISES

PARTICULAR	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
No. of Operating CPSES	236	235	232	234	231	226	230	227	225
Capital Employed	249855	265093	302947	331372	389934	417160	452336	504407	581250
Turnover	276002	310179	383799	458237	478731	572833	630704	744307	832584
Net Worth	134443	148064	160874	171406	225472	241846	291828	341595	412737
Profit Before dept. Int. Tax & EP (PBDITEP)	53062	56495	62212	69287	89550	101691	127320	142554	141951
Depreciation	15856	16768	19942	20520	26360	28247	31251	33147	34549
DRE / Prel. Exps. Written off	-	-	-	-	-	905	1025	986	869
Profit before int. tax & EP (PBITEP)	37206	39727	42270	48767	63190	72539	95039	108420	106533
Interest	17990	20025	20233	23800	24957	23921	23835	22869	22283

Profit before Tax & EP (PBTEP)	19216	19702	22037	24967	38233	48618	71144	85550	84250
Tax Provisions	5634	6499	7706	9314	12255	17499	22134	21662	23225
Net Profit Before EP	-	-	-	-	-	31119	49010	63889	61025
Net Extra Ordl. Items & Prior Period (ADJ.	-	-	-	-	-	-1225	-3933	-1075	-9263
Net profit	13582	13203	14331	15653	25978	32344	52985	64963	70288
Profit of Profit making CPSEs	20279	22508	24633	28494	36432	43316	61606	74433	76240
Loss of loss incurring CPSEs	6697	9305	10302	12841	10454	10972	8522	9336	5952
Profit making CPSEs (No.)	134	126	126	123	120	119	139	138	157
Loss Incurring CPSEs (No)	100	107	105	110	109	105	89	79	58
PSEs Making no profit/loss (No.)	2	2	1	1	2	2	2		
Operating PSEs not furnished information (no.)	-	-	-	-	-	-	-	-	10
Dividend	3609	4932	5455	8260	8068	13769	15288	20718	22886
Dividend tax	464	537	790	842	8	1193	1961	2852	3215
Retained profit	9509	7734	8086	6551	17902	17382	35835	41393	44187

Note :- Out of 225 CPSEs inoperation, 10 CPSEs have not furnished information, Hence, the analysis is based on theperformance data received from 215 CPSEs only.

Disinvestment and Revival of Sick CPSEs

The Government Policy on ‘disinvestment’ has evolved over the last decade and has been generally announced through the Budget. Disinvestment of Government equity in CPSEs began in 1991-92. Till 1999-2000, disinvestment was primarily through sale of minority shares in small lots. From 1999-2000 till 2003-04, the emphasis of disinvestment changed in favour of stategic sale. At present, the emphasis is tolist large, profitable CPSEs on domestic stock exchanges and toselectively sell small portions of equity in listed, profitable CPSEs (other than the Navratnas)

The National Common Minimum Programme (NCMP) stipulates a strong and effective Public Sector whose social objectives are met by its commercial functioning. Efforts are being made to modernize and restructure sick CPSEs and revive sick industry. Only the chronicallyloss making CPSEs may be closed or sold off after all the employees arepaid their legitimate dues.

The problem of sickness in CPSEs is addressed by the administrative Ministries/Departments in the Government by evolving appropriate need based strategy concerning a particular PSE. The sick industrial enterprises are referred

toboard for Industrial and Financial reconstruction (BIFR) under the provision of Sick Industrial Companies (Special Provision) Act, 1985 for formulating appropriate revival / rehabilitation packages. As for other loss making enterprises, administrative Ministries / Departments in consultation with management, workers and other expert / consultants take appropriate measures for restructuring these units.

The Government also set up a Board for Reconstruction of Public Sector Enterprises (BRPSE) in December, 2004 to advise the Government inter alia on the measures to be taken to restructure / revive CPSEs, including cases where disinvestments or closure or sale are justified. Till 31.10.2006 BRPSE has made recommendations in respect of 36 CPSEs, and Government has approved the proposals of 21 cases of CPSEs. The total cost involved is Rs. 5609.40 crore including cash assistance of Rs. 924.54 crore and non-cash assistance of Rs. 4684.86 crore.

Under the restructuring process of the sick and loss making enterprises emphasis has been laid on rationalization of Manpower in the Central PSEs. During the years 2000 and 2001, the Government further liberalized the Voluntary Retirement Scheme (VRS) for the employees of CPSEs enabling the CPSEs to rationalize their manpower. Cumulatively, around 5.67 lakh employees have opted for Voluntary Retirement from CPSEs since October 1988 till March 2006. As a safety net for separated employees of CPSEs, a scheme for Counseling, Retraining and Redeployment (CRR) is under implementation by the Government since 2001-02. The scheme aims at rehabilitation of the rationalized employees through short duration training programmes of 20 / 30 / 40 days.

Memorandum of Understanding (MoU)

On the recommendations of Arjun Sen Gupta Committee report, the Government of India introduced the concept of MoU during 1987-88. MoU defines clearly the relationship of the PSE with the Government, as well as the respective roles of the CPSEs and the Government for achieving better results. The MoU is also an attempt to bring a proper balance between accountability and autonomy of the management of CPSEs. The emphasis therefore is on achieving the negotiated and agreed objectives rather than interfering in day to day affairs of the CPSEs. While only 4 CPSes signed MoUs in 1987-88, there were 112 CPSEs that signed MoUs for 2006-07 and from 2007-08 it has been decided that all CPSEs will sign MoUs; Performance of CPSEs at the end of the year, under the MoU system, is evaluated on a 5 point scale of ‘Excellent’ “Very Good’’ “Good” “Fair’’ and “Poor’’ based on both financial and non-financial parameters.

Enhanced Financial Powers to CPSEs

Under the Articles of Association, the Board of Directors of CPSEs enjoy certain amount of financial powers and autonomy in respect of recruitment, promotion and other service conditions of below Board level employees. The Board of Directors of a CPSE exercises the delegated powers subject to broad policy guidelines issued by Government from time to time. The Government has granted enhanced powers to the Boards of profit making enterprises under the schemes of ‘Navratna’ and ‘Miniratna’ CPSEs.

Navratna scheme

The Navratna CPSEs at present are BHEL, BPCL, GAIL, HPCL, IOC, MTNL, NTPC, ONGC, SAIL, BEL, HAL and PFC. These CPSEs have been given enhanced autonomy and delegation of powers to incur capital expenditure (without any monetary ceiling), to enter into technology joint ventures / strategic alliance, to effect

organizational restructuring to create and wind up below Board level posts, to raise capital from domestic and international market, toestablish financial joint ventures and to wholly own subsidiaries, etc.

Miniratna scheme

The Government grants enhanced autonomy and delegation of financial powers to other profit making companies (other than Navratna CPSEs) subject to certain eligibility conditions and guidelines. These companies, called Miniratnas, are classified into two categories, namely, Category-I and Category-II. The criteria for conferring theMiniratna status are: (i) PSE should be profit making for the last 3 years continuously and should have positive net worth, (ii) it should not have defaulted in repayment of loans / interest payment on loans due togovernment, (iii) it should not depend uponbudgetary support or Government gurantee (Government guarantee required under the standard stipulations of external donor agencies will not affect the Miniratna status); and (iv) restructuring of the Board of Directors by inducting non-official Directors. CPSEs which have made pre-tax profit of Rs. 30 crore or more in at least one of the 3 years are given Category I status while others are given Category Miniratna if it fulfils the eligbility conditions. Presently there are 54 Miniratna PSEs (41 Category I and 13 Category II).

The enhanced powers delegated to the Boards ofMiniratna PSEs includes power to incur capital expenditure, to establish joint ventures and subsidiaries in India, to enter into technology joint ventures / strategic alliances and obtain technology and know-how by purchase or other arrangements. The exercise of these powers is subject to various conditions and guidelines laid down for this purpose, including restructuring of the Board of Directors by inducting non-official Directors.

STEEL

Today, India is the eighth largest Crude steel producing country in the world. The crude steel production in the country during 2004-05 was 38.486 million tonnes as compared to the production of 34.348 and 30.444 million tonnes in 2003-04 and 2003-03 respectively. It was 41.344 million tonnes (Provisional) during 2005-06.

Production : The production of Finished (Carbon) Steel during the last four years is as under :

(in million tonnes)

Item	2002-03	2003-04	2004-05	2005-06 (Prov.)
Finished (Carbon) Steel				
Main Producers	14.385	15.187	15.611	16.236
	(10.19)	(5.6)	(2.79)	(4.0)
Secondary Producers	19.285	21.770	24.444	26.400
	(5.6)	(12.91)	(12.28)	(8.0)
Total	33.671	36.957	40.055	42.636
	(9.9)	(9.7)	(8.38)	(6.4)

(Figures in parenthesis indicate percentage variation over the previous year)

(Source : Joint Plant Committee)

Sponge Iron : The Sponge Iron industry had been specially promoted so as to provide an alternative to steel melting scrap which was increasingly becoming scarce. Today, India is the largest producer of sponge iron in the world. The production of sponge iron was 6.44 million tonnes, during 2002-03 and 8.085 million tonnes during 2003-04 and 10.3 million tonnes during 2004-05. The production in 2005-06 increased to 12.5 million tonnes (Provisional).

Apparent Consumption: The apparent consumption of Finished (Carbon) Steel during 2003-04 was 31.169 million tonnes. It was 34.389 million tonnes during 2004-05 and 38.151 million tonnes (Provisional) during 2005-06.

Import and Exports : In India imports and exports of all items of iron and steel is freely allowed. Exports of high-grade iron ore, chrome ore and manganese ore are made through designated canalizing agencies subject to the ceiling imposed by the Government.

(i) Imports : Though the country's production of iron and steel is sufficient to meet the domestic demand, some quantity of steel is always needed to be imported especially those grades and qualities which are required in small quantities and therefore, do not justify setting up of production capacities.

Over the last few years India had been annually importing about 1 to 2 million tonnes of Finished (Carbon) Steel. Imports are mostly on price considerations and in some cases, to supplement domestic production. The observed growth in imports is mainly in hot rolled coils, cold rolled coils, semis and steel scrap. Imports of Finished (Carbon) Steel during the year 2002-03 was 1.510 million tonnes, which rose by 1.98 per cent during 2003-04 and again rose by 36.94 per cent to 2.109 million tonnes during 2004-05. It is partly estimated to be around 3.765 during 2005-06, which is 78.5 per cent more than the previous year.

(ii) Exports : Value addition in the Indian export basket has been a major trend. Earlier, exports consisted mainly of plates, structural bars and rods, now apart from these, hot rolled coils, cold rolled coils, colour coated sheets, GP/GC sheets, pig iron and sponge iron are also being exported.

The total volume of Finished (Carbon) Steel exported during the year 2002-03 was 4.506 million tonnes and 4.835 million tonnes during 2003-04. It was 4.381 million tonnes during 2004-05 and 4.350 million tonnes (provisional) during 2005-06.

RESEARCH AND DEVELOPMENT

Research and Development activity in iron and steel sector is carried out mainly by the iron and steel plants themselves, national research laboratories, academic institutions, etc. There is a significant improvement in areas of iron and steel making processes, upgradation of raw material, product development, increase in productivity, reduction in energy consumption by the in-house R & D activities. However, total R & D expenditure in iron and steel sector in India still remains relatively low at around 0.2 per cent of the total turnover of steel plants.

The Government decided to spend up to Rs. 150 crore from the interest accrued on Steel Development Fund (SDF) loans given to SAIL and TISCO (now Tata Steel Limited). Accordingly, Ministry of Steel has constituted an Empowered Committee (EC) under the chairmanship of Secretary (Steel). The EC has approved 44 research projects. Of this, 21 research projects have been completed yielding benefits to the iron and steel industry in the country.

DUTY EXEMPTION

Duty Exemption schemes enable duty free import of inputs required for export production. The Ministry of Steel provides the technical inputs to DGFT for grant of advance authorisation and for fixation of standard input-output norms, which play and important role in boosting exports of iron and steel.

Duty Entitlement Pass Book (DEPB) Scheme, under the Duty Remission category allows credit of import charges on inputs used in export products. The scheme has proved to be very attractive amongst the exporters and it plays a key role in encouraging exports of iron and steel products. However, the rates have been continuously reducing due to reduction in customs duty on the various inputs.

FERTILIZERS

India today is the third largest producer of nitrogenous fertilizers in the world only behind China & USA. At present, there are 56 large size fertilizer units in the country manufacturing a wide range of nitrogenous, phosphatic and complex fertilizers. Of these, 29 units produce urea, 20 units produce DAP and complex fertilizers, 7 units produce low analysis straight nitrogenous fertilizers. There are 9 units that manufacture Ammonium Sulphate as by-product. Besides, there are about 72 small and medium scale units in operation producing single super phosphate (SSP). The total installed capacity of fertilizer production, which was 119.60 LMT of nitrogen and 53.60 LMT of phosphate as on 31.03.2004, has marginally increased to 120.61 LMT of nitrogen and 56.59 LMT of phosphate as on 31.01.2007.

The consumption of fertilizers in the country has been showing an appreciable growth in last few years. The total consumption of chemical fertilizers in nutrient terms has increased from 6.06 million tones in 1981-82 to 184 million tones in 2004-05 and 22 million tones in 2006-07. The average consumption of 105 Kgs per hectare in the country however, is much below as compared to many developing countries including that of out neighbors like Pakistan and Bangladesh. The consumption of fertilizers needs to be further increased to meet our increasing requirement of food in the country. Along with increase in consumption, there is a need for balance in the use of nutrients with adequate application of secondary and micro nutrients.

In the past, it has been observed that while there was adequate availability of fertilizers in each State at the macro level, there were also pockets of shortages in some of the districts. To address this concern, a new web based Fertilizers Monitoring System (FMS) was launched on 22nd January 2007 to monitor the movement of fertilizers up to the District level. To ensure the adequate availability of fertilizers up to the block level, the dealership network has also been expanded during thelast one year.

Under the New Pricing Scheme-Stage-III for urea units effective from 01.10.2006, the Government will reimburse the actual cost of transportation of fertilizers upto the block level so that the fertilizers reach up to the block level without hindrance. Further, it has also been decided under this scheme that subsidy will be paid to the manufacturer/importers only after the fertilizers reach the district as per the month-wise supply plan drawn up by the respective State Agriculture Department in consultation with the fertilizer companies. Moitoring of implementation of these supply plan is being done through the Fertilizer Monitoring System and is in the public domain.

Realizing the need to strengthen domestic urea production capacity to fulfill

the demand supply gap for food security as also to reduce the dependence upon imports, the Government has decided 'in principle' to examine the possibility of revival of Fertilizer Corporation of India Ltd (FCIL) and Hindustan Fertilizer Corporation Ltd. (HFCL) subject to the confirmed availability of gas Fertilizer PSUs / Co-operatives Rashtriya Chemicals & Fertilizers Ltd. (RCF), National Fertilizers Ltd (NFL) and Krishak Bharati Co-operative Ltd. (KRIBHCO) have shown their intention to participate in the revival process and accordingly process of preparing techno-economic feasibility reports has been initiated. Possibilities are also being explored for setting up of joint venture projects in the countries abroad which have abundant and cheaper feed stock.

The consumption, indigenous production and imports of fertilizers in terms of fertilizer nutrients, (NPK) during the period 1998-99 to 2006-2007 are given below:

(lakh tonnes)

Year	**Consumption**	**Production**	**Imports**
1998-99	167.98	136.24	31.45
1999-2000	180.69	142.89	40.75
2000-01	167.02	147.04	20.91
2001-02	175.60	146.28	23.99
2002-03	160.94	144.74	16.74
2003-04	167.98	142.76	20.18
2004-05	183.99	154.05	27.50
2005-06	203.40	155.75	52.53
2006-07	220.45*	160.95	60.80

* Estimated

With the objective of promoting balanced application of all the three nutrients, i.e., initrogen, phosphorus and potash and making available fertilizers to farmers at affordable prices, the Government provides subsidy on urea, which is the only fertilizer at present under statutory price control and concession on decontrolled phosphatic andpotassic fertilizers (P&K). The details of amount of subsidy / concession paid on urea and decontrolled P&K fertilizers during the last five years are given in the table below:

(Rs in crore)

Period	Amount of concession disbursed on P & K fertilizers	Amount of subsidy disbursed on			
		Indigenous urea	Imported urea	Total	Total for all fertilizers
2002-03	2488.00	7790.00	0.00	7790	10278
2003-04	26.06.00	8521.00	0.00	8521	11127
2004-05	3976.99	10243.15	742.37	10985.52	14962.51
2005-06	4499.19	10460.17	2164.71	12624.88	17124.07
2006-07	6641.11	12650.37	5071.06	17721.43	24362.54

PUBLIC SECTOR UNDERTAKINGS

At present, there are ten public sector undertaking and one co-operative under the administrative control of this Department. Company wise details are given below:

National Fertilizers Limited (NFL) has, at present, six operating units, viz. Calcium Ammonium Nitrate (CAN) Plant at Nangal and the Urea Plants at Nangal, Bhatinda, Panipat and Vijaiput (twounits). The total installedcapacity of NFL is14.86 LM of Nitrogen. During 2005-06 the company has produced 33.44 lmT of Urea.

Rashtriya Chemicals and Fertilisers Limited RCH) is operating five fertilizer plants at Trombay setup during the period from October 1965 to July 1982 and a large gas based fertilizer plant at Thal which started commercial production in 1985. The installed capacity of the RCF plants is 10.54 LMT of Nitrogen and 1.17 LMT of Phosphate. During 2005-06, the production of nitrogen and phosphate was 8.84 LMT and 1.09 LMT, respectively. The company produces certain industrial chemicals like Methenol, Concentrated Nitirc Acid, Methylamine, Ammonium Bi-Corbonate, Sodium Nitrate, Di-methylacetamide, Dimethyl formamide, Ammonium Notirc, Agron etc. too.

Hindustan Fertilizer Corporation Limited (HFC) and Fertilizer Corporation of India Limited (FCI) were declared sick in November 1992. After considering the rehabilitation proposals of these two PSUs, the Government has on 5 September 2002, decided toclose down HFC and FCI excepting its Jodhpur Mining Organization of FCIL, which has been hived off into a new company namely FCIL-Aravali Gypsum and Mineral India Limited (FAGMIL). However, pursuant to the recent decision of the Government the frasibility of revival of the individual units of FCIL / HFCL is being examined subject to the Confirmed availability of gas.

Brahmputra Valley fetilizer Corporation Limited (BVFCL) has been constituted into a new company from 1 April 2002 after hiving off the namrup units from HFC. A major revamp of the units of BVFCL has been undertaken at an approved cost of Rs. 509.90 crores. Unit I and III of BVFCL have been commissioned in March 2002 after their revamp. Unit II was commissioned in November 2005. Unit II has produced 32,391 MT of Urea whereas Unit III has produced 2.19 LMT of Urea during 2005-06.

FCIL-Aravali Gypsum and Mineral India Limited (FAGMIL) has been incorported as a PSU on 14 February 2003 after having off the Jodhpur Mining Organization of Fertilizer Corporation of India Ltd. (FCIL) apart from taking over the JMO which is engaged in mining of Gypsum in four districts of the State of Rajasthan, the new company's objectives include extending the mining activities in other minerals available in the State ofRajasthan. During 2005-06 the company has produced and sold 8.54 LMT of gypsum.

The Fertilizers and chemicals Travancore Limited (FACT) Udyogmandal (Kerla) has three operating units, one at Udtogmandal and two at Cochin. Besides fertilizers, the company is engaged in the manufacture of chemicals. With the commissioning of a caprolactam plant in October 1990, the company has entered the field of petro-chemicals also. FACT Engineering and Design Organization (FEDO), a division of the company, is engaged in design, engineering, procurement, supervision of constructionand commissioning of fertilizer / chemical plant. The annual installed capacity of FACT is 1.74 LMT of nitrogen and 1.26 LMT of phosphate. During 2005-06, the company has produced 1.44 LMT of factomphos and 1.73 LMT of Ammonium Sulphate.

Madras Fertilizers Limited (MFL) is a joint venture between the Government of India and the National Iranian Oil Company with the rest as public equity holding. At present, GOI holds Rs. 95.85 crore (59.50%), NIOC holds Rs. 41.52 crore (25.77%) and public hold Rs. 23.73 crore. (14.73%) of equity. The annual installed capacity of MFL is 3.47 LMT of Ammonia, 4.87 LMT of Urea and 8.4 LMT of NPK. Duging the year 2005-06 the company has produced 3.69 LMT of Urea, 2.08 LMT of NPK and 235 MT of Bio-Fertilizers.

Pyrites, Phosphates and chemicals Limited (PPCL) was set up in March 1960 for exploration pyrites, deposits and production of single-superphosphate at Amjhore in Bihar, exploration-cum-production mining of pyrites deposits as well as productionof single-superphosphate at Saladipura in Rajasthan andmining of rock phosphate from the Mussorie phosphorite deposites. The Government has dicided to close the company as it has not been found to be techno-economical viable. BIFR has decided to wound up the company on 20 november 2002 and has referred the matter tothe Patna High Court fo appointment of Official Liquidator.

Project & Development India Limited (PDIL), formerly known as Fertilizer (Planning and Development) India Limited, is engaged in design engineering, procurement and supervision of construction / commissioning of fertilizer and allied chemical plants. The company has played a pioneering role in developing the know-how for manufacture of catalysts in India. The company had been declared a sick company by the BIFR in December 1992. With a view to revive the company, the Government in April 2003 has decided to close down its R&D Division and the Sindri unit of the E&C Division and to revive the E&C Division located at NOIDA and BARODA and the catalyst Division at Sindri. The rehabilitation package, which was approved by Government of India in April 2003, has also been approved by the BIFR on 26 March 2004 and the same has since been implemented. During the year 2005-06 the company has posted a net profit of Rs. 1064 crores.

CO-OPERATIVE SECTOR

KRIBHCO has a gas-based ammonia-Urea plant at Hazira in Gujarat with a capacity to produce 7.95 LMT in terms of nitrogen per annum. During the year 2005-06 the Society has produced 18.07 LMT of Uea, 11.29 LMT of Ammonia and 775.2 MT of Bio-Fertilizers.

CHEMICAL INDUSTRY

Chemical Industry is one of the oldest industries in India, which contributes significantly towards industrial and economic growthof the nation. It ishighly science based and provides valuable chemicals for various end products such as textiles, paper, paints and vamishes, leather etc., whichare required in almost all walks of life. The Indian Chemical Industry forms the backbone of the industrial and agricultural development of India and provides building blocks for downstream industries.

Chemical Industry is an important constituent of the Indian economy. Its size is estimated at around US$ 35 billion approx., which is equivalent to about 3% of India’s GDP. The total investment in Indian Chemical Sector is approx. US$ 60 billion andtotal employment generated is about I million. The Indian Chemical sector accounts for 13-14% of total exports and 8-9% of total imports of the country. In terms of volume, it is 12th largest in the world and 3rd largest in Asia. Currently, per capita consumption of products of chemical industry in India is about 1/10th of

the world average. Over the last decade, the Indian Chemical industry has evolved from being a basic chemical producer to becoming an innvoative industry. With investments in R&D, the industry is registering significant growth in the knowledge sector comprising of specialty chemicals, fine chemicals and pharmaceuticals. The Indian Chemical Market Segment wise is as under :-

Segment	Market Value (billion US $)
Basic Chemicals	20
Specialty Chemicals	9
High End / Knowledge Segment	6
Total	35

The Indian Chemicals Industry comprises both small and large-scale units. The fiscal concessions granted to small sector in mid-eighties led to establishment of large number of units in the Small Scale Industries (SSI) sector. Currently, the Indian Chemical industry is in the midst of a major restructuring and consolidation phase. With the shift in emphasis on product innovation, branch building and envioronmental friendliness, this industry is increasingly moving towards greater customer orientation. Even though India enjoys an abundant supply of basic raw materials, it will have to build upon technical services and marketing capabilities to face global competition and increase it share of exports.

As the Indian economy was a protected economy till the early nineties, very little large-scale R&D was undertaken by the Chemical industry to create intellectual property. The Industry would. Therefore, have to make large investments in R&D to successfully counter competition from the international chemicals industry. With a number of scientific institutions, the country's strengthlies in its large pool of highly trained scientific manpower.

India also produces alarge number of fine and specialty chemicals, which have very specific uses which find wide usage as food additives and pigments, polymer additives and pigments, polymer additives, anti-oxidants in the rubber industry, etc.

In the Chemical Sector, 100 percent FDI is permissible. Manufacture of most chemical products inter-alia covering organic / inorganic, dyestuffs and Pesticides is delicensed. The entrepreneurs need to submit only IEM with the Department of Industrial Policy and Promotion provided no locational angle is applicable. Only the following items are covered in the compulsory licensing list because of their hazardous nature.

- Hydrocyanic acid & its derivatives
- Phosgene & its derivatives
- Isocynates & di-isocynates of hydrocarbons.

The Dyestuff sector is one of the important segments of the chemical industry in India, having forward and backward linkages witha variety of sectors like textiles, leather, paper, plastics, printinginks and foodstuffs. The textile industry accounts for the largest consumption of dyestuffs at nearly 70 percent. From being importers and distributors in the 1950's, it has now emerged as a verystrong industryanda major foreign exchange earner. India has emerged as a blobal supplier of dyestuffs and dye intermediates, particularly for reactive, acid, vat and direct dyes. India accounts for approximately 7 percent of the world production.

Chemical fertilizers andpesticides played an importantrolein the "Green Revolution" during the 1960s and 1970. Indian exports of agrochemicals have shown an impressive growth over the last five years. The key export destination markets are USA. U.K., France, Netherlands, Belgium, Spain, South africa, Bangladesh, Malaysia and Singapore. India is one of themost dynamic generic pesticide manufacturers in the world with more than 60 technical grade psticides being manufactured indigenously by 125 producers consisting of large and medium scale enterprises (includingabout 10 multinational companies) and more than 500 pesticide formulators spread over the country.

Production performance of some of the important hemicals including pesticides and dyestuff are given below:

(in 000'MT)

Group	2003-04	2004-05	2005-06
Chior Alkali Chemicals	5070	5272	5475
Inorganic Chemicals	441	508	544
Organic Chemicals	1445	1473	1510
Pesticides (Tech)	84	94	82
Dyes & Dyestuffs	28	28	30
Total	**7066**	**7375**	**7641**

2. CHEMICALS PUBLIC SECTOR UNDERTAKINGS.

There are two Public Units, namely Hindustan Organic Chemicals Ltd. (HOCL) and Hindustan Industan Insecticides Ltd. (HIL) in the Chemicals Sector.

Hindustan Organic Chemicals Ltd was incorported in December, 1960 at Rasayani, Raigad district in Maharashtra, withthe main objective of manufacturing chemical intermediates required for the manufacture of drugs, dyestuffs rubber chemicals and laminates, etc. The comany has two units at Rasyani (Maharashtra) and Kochi (Kerala). The Rasyani unit produces organic group of heavy chemicals and intermediates such as nitrobenzene, formaldehyde, aniline, sulphuric acid, oleum etc. The Kochi unit produces phenol,acetone hydrogen peroxide. The company had floated a subsidiary called Hindustan Flouorocarbons Limited (HFL) for manufacturing plyletrafluorethylene (PTFE). The Government have sanctioneda revival package for HOCL in March, 2006 which includes infusion of Rs. 250 crore for repayment of high cost bonds and introduction of fresh VRS. The revival package is under implementation. A revival package in respect of HFL is also under consideration. The production of the company during 2005-06 was 2,16,224 MT with a turnover of Rs. 451.03 crores.

Hindustan Insecticides Limited (HIL), incorported in 1954, has three units at Bathinda (Punjab), Udyogamandal (Kerala) and Rasyani (Maharashtra). HIL is engaged in the manufacture of DDT, Malathion, Endosulfan and Butachlor, the major pesticides used in the country. The Government have approved a revival package for HIL in July 2006 which consists of waiver / writing of loan and interests. On implementation of the revival package, the company's networth has turned positive. The roduction by the company during 2005-06 was 19,866 MT / KL with a turnover of Rs. 149.35.

3. Petroleum Chemical Petrochemical Investment Regions (PCPIRs)

- The PCPIR Policy has been approved by the CCEA. The same has been printed in the Gazette of India (extraordinary) dated 4th April, 2007. The same is also available on the web site of the Department. (www.chemicals.nic.in)
- Integrated chemical regions are propelling the growth of this segment of Industry in various parts of world. Such parks at Houston, Rottenlam, Shanghai, Antwerp are examples.
- By its very nature, the chemical and petrochemical industry requires certain basic infrastructure facilitie, incl. a good port, chemicals storage terminal, a common effluent treatment plant and most important effective green belt to seagregate the industrial units fromhuman settlements.
- Toreap the benefits of co-siting, integrated Petroleum, Chem. & Petrochem complexes are the best option. Such Region scan provide excellent infrastructure for the sector to be globally competitive.
- The PCPIR is expecte to be a specifically delineated investment region having an area of about 250 sq. kms (with at least 40% area earmarked for processing activities). This region would be a combination of production projects, public utilities, logistics, environmental protection, residential areas and administrative services. The purpose is to encourage global scale investment inpetroleum, chemical & petrochemical sectors to accelerate economic growth.
- The Central Government will consider and approve applications from the State Governments for establishment of PCRIRs in terms of this policy and facilitate the availability of external physical infrastructure linkages including Rail, Road. Ports, and Airports. Similarly, the State Goverment, applying for a PCPIR, will ensure that all physical infrastructure and utilities linkages under its jurisdiction are provided.
- This is one policy area which would facilitate increasing the competitiveness of the manufacturing sector of this industry.
- Sh. Ram Vilas Paswan, Minister (C&F) formaily released this Policy on 8th May, 2007.

4. INDIA CHEM-2006

To promote the Indian Chemical Industr, the Govt. of India, Department of Chemicals & Petrochemicals & FICCI have jointly been organising the "India Chem" series of events every altemate year. These events provide a platform to the Indian chemical industry to showcase its potential to an international audience as also the participation of major international players in the chemical, petrochemical and pharmaceutical sectors exposes the Indian industry to the international developments. So far four such events have been organized the last one beingin November, 2006. INDIA CHEM-2006 4th International Exhibition & Conference was held from November 8-10, at Mumbai. The event was inaugurated by the Hon'ble Minister for Chemicals & Fertilizers & Steel, Shri Ram Vilas Paswan on November 8, 2006.

(i) **Highlights of the event INDIA CHEM-2006**

- There was total participation by 260 major companies including 140 foreign companies which reflects their interest in India.

- There were Exhibitors from 14 countries and Business Visitors from 58 countries.
- Italy was the Partner Country and 24 Italian Companies participated.
- Japan was the Guest country and 40 major Japanese companies participated.
- Germany participated as the Focus country with 16 German companies taking part.
- Country pavilions were set up by USA, CHINA, BELGIUM & TAIWAN.
- Besides there was participation by companies from other countries, such as: Karea, France, Iran, Switzerland, Singapore, Russia & UK.
- Gujarat was the Partner State and it put up a pavilion.
- Besides this pavilions were put up by the States of Maharashtra, West Bengal, Assam & Rajasthan.
- There were (18500) Business visitors tothe event.
- On the spot business generated at the exhibition is estimated to be Rs. 325 crores. (72.2 USM Dollar), anticipated orders would be much higher. (Figuresbased on Survey)

(ii) Other Business Platform at India Chem-2006

- Buyer-seller meets were organised by Chemexcil with over 60 international buyers from various countries.
- Concurrent conference was attended by 200 delegates with 65 speakers including 15 overseas speakers and seior officials of Government of India, diplomats, CEOs and top officials from the chemical companies from India and abroad, academicians and students. The Conference also included a Round Table on Policy matters which provided for an interface between the Captains of the industry and representatives of the concerned Government agencies.
- India Chem 2006 was an over whelming success and the participants benefited by the enthusiastic business response.

5. Neem Project

The Department is implementing a project for development of safe and environment friendly pesticides utilizing the neem seeds. The objective of this programme is to promote production, processing and use of neem based products and providing farmers with eco-friendly / biodegradable pesticides thereby aiding wasteand development and generating rural employment (especially for women).

This project was implemented at two locations namely at Nimpith, West Bengal, through Vivekanand Institute of Biotechnology and at Nagpur, Maharashtra through Neem Foundation. The results of the first phase were encourging. There was goodparticipation of rural women in this program with work relating to collection and depulping of neem fruits. The neem based pesticide was used on vegetable crops (esp. tomato, beetle leaves and other vegetables) which are the main crops in the command area of the project. As a result of this the farmers adopted the same and the results were impressive. The first phase oftheprogram came to a close on 31.5.2005.

During Phase II of theproject which has commenced in October 2006, the activities of the project are sought to be continued and further taken to areas impacted. by heavy use of chemical pesticides including. Tea / Coffee / Spice

plantations etc esp. in the NE region, in addition to continuing the sactivity through the present locations. The project would provide the scientific basis for wider acceptance of the simple low cost technology of neem based pesticides for use indifferent crops which are under the threat of persistent residues of highly hazadous toxic chemicals. The project world also aim at enhancing shelf life and toxicological screening criteria to establish a scientific basis for quality control of neem based pesticides on commercial basis. This will bacilitate involvement of industry andwider availability of neem seeds pesticides and will also lead involvment of industry and wider availability of neem seeds psticides and will also lead to:

i. Environmentally sustainable economic development.

ii. Improved water quality both ground and surface water

iii. Conservation of bio logical diversity

iv. Reclamation ofwasteland and preservation ofecosystem

v. Propagation of receptive models for development, promotion and use of bio-pesticides as alternative to Persistent Organic Pollutants (POPs) pesticides.

6. Regional Network of Pesticides for Asia and the Pacific (RENPAP)

RENPAP is a network set up under the United Nations Development Programme (UNDP) consisting of 17 participating countries in the Asia Pasific Region. The 17 countries partcipating in this Network include India, China, Pakistan, Philipines etc. India hosts the Secretariat oif RENPAP and contributes to the Trust Fund set up. The RENPAP programme aims to promote environment and user friendly crop protection agents throughadopting cleaner production and environmentally sound management practices thereby increasing agricultural production and ensuring safety to the farmers and workers. The programme is implemented in a decentralized manner through eight Technical Coordinator Units (TCU) hosted by eight member countries which act as focal points of specialized operations of the network, e.g., the TCU on User and Environment Friendly Pesticide Formulation Technology is based in the Institue of Pesticides Formulation Technology (IPFT), India (an automonous inst. of the Deptt).

RENPAP activities are supported by a trust Fund, which comrises of contributions from the member countries, private industry etc. Utilization from Trust Fund is based on the budgets approved by the Tripartite Review (TPR) / Project Management Committee (PMC) to monitor the implementation of the various activites. The last such review took palce in the year 2006 at Nantong in PR of China. The present validity of the program is upto October 2008. This has been approved by the Department of Economic Affairs, Ministry of Finance.

B. Pharmaceutical Sector,

1. Pharmaceutical Policy

In Februrary 2002, the government announced the ‘Pharmaceutical Policy-2002’. The salient features of this Policy are: (i) Industrial licensing for all bulk drugs cleared by Drugs Controller General (India), all their intermediates and formulations will be abolished, subject to stipulations laid down from time to time in the Industrial Policy except in the cases of : (a) bulk drugs produced by theuse of recombinant DNA technology, (b) specific cell / tissue targeted formulations; (ii) foreign investment up to 100 per cent will be permitted, subject to stipulations laid down from time to time in the Industrial Policy, through the automatic route in the case of all bulk

drugs cleared by Drugs Controller General (India), all their intermediates and formulations, except those, referred to in (i) above, kept under industrial licensing (iii) Automatic approval for foreign Technology Agreement will be available in the case of all bulk drugs cleared by the Drugs Countroller General (India), all their intermediates and formulations, except those referred to in (i) above, kept under industriallicensing for which a special procedure prescribed by the government would be followed; (iv) measures to give impetus to R&D in the Drug Sector are asfollow: (a) A manufacturer producing a new drug patented under the Indian Patent act, 1970, and not produced elsewhere, if developed through indigenous R&D, would be eligible for exemption from price control in respect of that drug for a period of 15 years from the date of the commencement of its commecial production in the country, (b) A manufacturer producing a drug in the country by a process developed through indigenous R&D patented under the Indian Patent Act, 1970 would be eligible for exemption from prices control inrespect of that drug till the expiry of the patent from the date of the commencement of its commercial production in the country through new patent process; (c) A formulation involving a new delivery system developed throughindigenous R&Dand patented under the Indian Patent Act, 1970 for process patent for formulation involving new delivery system would be eligible for exemption from price control in commercial production in the country till be expiry of the patent; (v) The system of the price contol would be operated throughly a single list of price controlled drugs selected on the basis of criteria as laid down in the 'Pharmaceutical Policy 2002' and formulations based there on with a MAPE of 100 per cent for indigenous formulations and margin up to 50 per cent forimported formulations. The 279 items apperaing in the alphabetical list of Essential Drugs in the National Essential Drugs List (1966) of the Ministry of Helth and Family Welfare and the 173 items, which are considered important by that Ministry from the point of view of their use invarious Health Programmes, in emergency care, etc, with the exclusion, as inj the past, there from of sera and vaccines blood products, combinations, etc. would from the total basket out of which selection of bulk drugs would be made for price regulation; (vi) Ceiling price may be fixed for any formulation, from time totime and it would be obligatory for all, including smallscale units or those marketing under generic name to follow the price so fixed (vii) An independent body of experts, called the National Pharmaceutical Pricing Authority has been entrusted withthe task of price--flxation / revision and other related matters, (viii) Government would keep a close watch on the prices of medicines which are taken out of price contol, in case of prices of these medicines rise unreasonably the government would take appropriate measures including reclamping of price control: (ix) the provision of limiting profitably as tper the III Schedule of the present Drugs (Price Contol) Order, 1995 would be done away with, However, if necessary to do so in public interest prices of any formulation including a non-scheduled formualtion would be fixed or revisedby the government.

Public interest Litigation in Karnataka High Court has resulted in an order dated 12 November 2002, which stopped the Government from implenenting the price control regime of the Pharmaceutical Policy-2002. The govenment have filed a Special Leave Petition in the Supreme Court against the order of the Karnataka High Court.

The government consitituted a Committee under the Chairmanship of Joint Secretary (Pharma) to exmine the issue of span of price ceontrol (including trade margin). subsequently, a Task Force under the Chairmanship of Dr Pronab Sen,

Principal Adviser, Planning Commission was also constituted to explore options other than price control to make available life saving drugs at reasonable prices.

Based on there commedndations of the Committee under the Chairmanship of Joint Secretary (Pharmaceutical) and the recommendations of the Task Force and after extensive disussions with various stake holders including drug Industry, the department prepared the Draft national Pharmaceutical Policy-2006 and inline with the declared objective of the Government in the national Common Minimum Programme to make available life saving Drugs at reasonable prices to the poor. This policy was submitted before the Cabinet for its approval. The Cabinet considered the policy in its meeting held on 11.1.2007 and has referred the matter to a Group of Minister (GOM). The first meeting of the GOM was held on 10-4-2007. Final view is yet to be taken by the GOM.

2. PHARMA PUBLIC SECTOR UNDERTAKINGS

There are five Central Public Sector Undertakings and five Joint Sector Undertakings in the Pharmaceuticals Industry Sector under the administrative contrrol of the Department of Chemicals & Petrochemicals, Besides, there are two wholly owned subsidiaries. The brief profile o f these organizations is given in the subsequent paragraphs.

1. **Indian Drugs & Pharmaceuticals Limited (IDPL)** was incorporated on the 5th April, 1961. The company has presently there manufacturing plants, one each at Rishikesh in Uttaranchal, Hyderabad in Andhra Pradesh and Gurgaon in Haryana. IDPL has two wholly owned subsidiaries, namely, IDPL (tamil Nadu) Ltd., Chennai in Tamil Nadu and Bihar Drugs & Organic Chemicals Ltd. at Muzaffarpur, Bihar. In addition, IDPLhas two joint sector undertakings, promoted in collaboration with the respective State Governments. These are Rajasthan Drugs and Pharmaceuticals Ltd. (RDPL), Jaipur and Orissa Drugs & Chemicals Ltd. (ODCL), Bhubaneshwar. In pursuance of BIFR order dated 26th march 2004, the Uttar Pradesh Drugs & Pharmaceuticals Limited, a joint sector undertaking of IDPL has been taken over by Government of U.P. w.e.f. 1st April 2004.

BIFR recommended winding up of IDPL on 4.12.2003. Department of Chemicals & Petrochemicals filed an appeal the opinion of BIFR in Appellate Authority for Industrial & Financial Reconstruction (AAIFR) on 10.2.2004. AAIFR at its hearing held on 13.9.2005, set aside the impugned order dated 4.12.2003 of BIFR and remanded the matter back to BIFR for taking further action for rehabilitation of IDPL.

The Board for Reconstruction of Public Sector Enterprises (BRPSE) at its meeting held on 9.3.2007 having considered the rehabilitation scheme for revival of IDPL recommended it for approval of the Government. Cabinet at its meeting held ion 17.5.2007 considered the proposal and referred it to GoM for consideration at the first instance. GoM is yet to be constituted.

(ii) **Hindustan Antibiotics Ltd. (HAL),** Pimpri, Pune was incorporated on 30th March, 1954. This was the first Public Sector company in drugs and pharmaceuticals. HAL has its plant located at Pimpri. There are three joint sector units promoted by HAL in collaboration with the respective State Governments. These are Karnataka Antibiotics & Pharmaceuticals Ltd. (MAPL) at Nagpur in Maharashtra and Manipur State Drugs & Pharmaceuticals Ltd. (MSDPL) at Imphal, in Manipur. MAPL & MSDPL have since been closed. The main products of HAL are bulk drug Penicillin-G, various salts of Penciling and Streptomycin. The company produces a wide range of Pharmaceutical formulations including agro-vet products. The company was

referred to the BIFR in January, 1997 and was declared sick. In the Budget 2004-05, the Government announced financial support for restructuring the company. In March 2006, Government approved rehabilitation Scheme for revival of the company. The rehabilitation Scheme inter alia involves the following :

i.	Cash infusion by GOI	Rs. 137.59* crores
ii.	Write off / exemptions from GOI	Rs. 267.57 crores
iii.	Sacrifices by Banks, financial institutions and PSUs	Rs. 103.34 crores

*Of this, Rs. 56.96 crores was to be generated by HAL by selling land. Pending sale of land, GOI released Rs. 56.96 crores of HAL as interest free loan refundable within 2 years, HAL would initiated action to sell land as soon as BIFR constitutes Asset Sales Committee.

The entire cash infusion of Rs. 137.59 crores was released to the company. Parliament approved waiver of loans & interest (Rs. 259.43 crores)

BIFR at its hearing held on 5.10.2006 sanctioned the rehabilitation scheme. The scheme is, however, yet to be notified by BIFR.

(iii) **Bengal Chemicals & Pharmaceuticals Limited (BCPL)** was incorporated on the 17th March, 1981. The company has four manufacturing units one each at Maniktala in Kolkata, Panihati at North 24 Parganas (West Bengal_, one in Mumbai (Maharashtra) and the fourth one at Kanpur (UP). The company manufactures and markets a wide range of industrial chemicals, a large number of drugs and pharmaceuticals besides cosmetics and home products. BIFR sanctioned a Modified Revised Rehabilitation Scheme on 14th January 2004 for the revival of BCPL. In December 2006, Government approved rehabilitatino scheme for revival of the company. The plan inter alia involves the following :

I.	Cash Infusion by GOI	Rs. 207.19 crores
II.	Waiver of Loans / Interest (As on 31.3.2005)	Rs. 233.41 crores
III.	Waiver of Loan / Interest by the GOI not to be treated as income in terms of Income Tax Act.	Not quantified

As contemplated in the Rehabilitation Scheme, Rs. 117.19 crores was released in March 2007, and a provision has been proposed for budgetary support of Rs. 90.00 crores during 11th Five Year Plan.

(iv) **Bengal Immunity Limited (BIL)** was incorporated on 1st October, 1984. BIFR issued winding up orders of BIL. The company was closed. However, appointment of Liquidator in respect of BIL was stayed on a Writ Petition filed by the BIL Employees Union and thereafter this Department on the ground that a Committee had been set-up to look into the issue of revival of BIl. The Committee has since submitted its report. The report is under examination.

(v) **Smith Stanistreet Pharmaceuticals Limited (SSPL)** was incorporated on the 19th July, 1978. BIFR has issued winding up orders of BIL. The company is closed. The High Court of Kolkata has since appointed the Liquidator.

C. PETROCHEMICALS SECTOR

1. NATIONAL POLICY ON PETROCHEMICALS

The National Policy on Petrochemicals was approved by Government on 12.4.2007. The National Policy on Petrochemicals aims to :-

(i) increase investments in the sector (both upstream and downstream) and capture a slice of the resurgent Asian demand in polymers and downstream processing through additions in capacity and production by ensuring availability of raw materials at internationally competitive prices, creating quality infrastructure and other facilitation to ensure value addition and increase exports.

(ii) increase the domestic demand and per capita consumption of plastics and synthetic fibres from the present level of 4 Kgs and 1.6 Kgs, increase the competitiveness, polymer absorption capacity and value addition in the domestic downstream plastic processing industry through modernization, research and development measures and freeing it from structural constraints;

(iii) facilitate investment in the emerging areas of petrochemicals and

(iv) achieve environmentally sustainable growth in the petrochemical sector through innovative methods of plastic waste management, recycling and development of bio-photo-degradable polymers and plastics.

(v) promote Research and Development in Petrochemical and promote Human Resource Development.

Salient Features of Policy are :

(i) Setting up of a standing Committee on Petrochemicals Feedstock for recommending a policy framework for feedstock.

(ii) **INFRASTRUCTURE**

(a) Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs)- The Petroleum, Chemicals and Petrochemicals Investment Regions will promote Investment in this sector and make the country an important hub for both domestic and international markets, as per PCPIR policy. The Policy has been announced by the Government.

(b) **Exiting Industries :** The Department of Chemicals and Petrochemicals would set up Facilitation mechanism in consultations with the concerned Ministries.

(c) **Plastic Parks :** Setting up of dedicated Plastic Parks to promote a cluster approach in the areas of development of plastic applications and plastic recycling.

(d) **Clusters :** Provision of common infrastructure facilities to address the constraints of common effluent treatment, transport linkages including roads etc., power supply, water and facilities.

(iii) **TECHNOLOGY AND RESEARCH AND DEVELOPMENT**

a) **Petrochemical Research and Development Fund :** A new scheme of Petrochemical Research and Development Fund (PRDF) which would cater to the projects of R&D, waste management, recycling and development of biopolymers and biodegradable polymers, is proposed tobe formulated.

b) **Plastics Development Council :** The Council will be a trade / industry body advisory body and consist of members from the industry and the Government.

c) **Centres of Excellence in Polymer Technology :** To establish Centres of Excellence in educational and research institutions working in the field of polymers like National Chemical Laboratory, Indian Institute of Chemical

Technology, Indian Institutes of Technology, National Institutes of Technology, Centre for Plastic Engineering and Technology, etc.

(iv) DEVELOPMENT OF PLASTICS IN THRUST AREAS

To set up an Inter-Ministerial Expert Committee under the Department of Chemicals and Petrochemicals, which will look into the requirement of making the use of plastics in thrust areas and make recommendations to the concerned Ministries.

(v) DERESERVATION OF PLASTICS

Items of plastics exclusively reserved for the small scale industry be de-reserved in a time-bound manner through a consultation process with all stake holders.

(vi) ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

Promotion of recycling technology for used plastics will be promoted. Due emphasis will be given to recycling of the post consumer spent packages. Urban Local Bodies would be supported and their capability will be strengthened so that they can effectively deal with issues relating to plastic waste management. An incentive Scheme for Urban local bodies which contribute significantly towards plastic waste management recycling would be formulated with the Ministry of Urban Development as nodal agency.

(viii) PROMOTION OF PLASTICS

1. National Awards for Technology Innovation
2. Industrial Trade Fairs and Exhibitions

D. AUTONOMOUS INSTITUTIONS

1. CENTRAL INSTITUTE OF PLASTICS ENGINEERING AND TECHNOLOGY

Central Institute of Plastics Engineering & Technology (CIPET) is a premier institution with commitment of Human Resources Development (HRD), and Quality technical services in Plastics Engineering & Technology for the plastics and allied industries in the country. CIPET has attained multifaceted growth by augmenting activities in Training, Research & Application Development, Entrepreneur Development and Consultancy Services in last 38 years.

CIPET has been accredited with ISO 9001 : 2000 certification on “Design, Development and Conduct of Specialised Training Courses in Plastics Engineering & Technology and Rendering Technical I Consultancy Services in Design, Tooling, Plastics Processing & Testing to the Plastics & Allied Industry.”

CIPET was established in 1968 at Chennai under the aegis of Ministry of Chemicals & Fertilizers, Govt. of India with the assistance of UNDP / ILO. Over the years, the need and necessity of CIPET services was felt by various State Govts., which resulted in establishment of CIPET centres at Ahmedabad, Amritsar, Bhopal, Bhubaneswar Hyderaabd, Imphal, Lucknow, Mysore, Hajipur, Haldia and Guwahati. Three more CIPET centers have been approved for establishment at Jaipur (Rajasthan), Aurangabad (Maharashtra) and Panipat (Haryana). The training activities at these new centres have already been commenced in the academic year 2006-07.

CIPET centres have uniform infrastructure facilities in the areas of Design CAD / CAM, Tooling, Plastics Processing, Testing & Quality Assurance under one roof. The Institute conducts 07 long-term courses leading to Post Graduate Degree

(M.Tech.), Post Graduate Diploma, Post Diploma and Diploma in various disciplines of Plastics Engineering & Technology. The infrastructure facilities in terms of machinery and equipments are continuously upgraded / modernized to match the technological development and needs of the industry globally. CIPET has ambitious plans of having its presence felt in South East Asian and Middle East Countries. Asian Institute for Development Studies, Manila (Philippines), UNIDO-Nigeria, Gulf Organization for Industrial Consulting (GOIC), Qatar, Ministry of Commerce and Industry (MOCI)-Sultanate of Oman, Export Development Board, Srilanka, have enrolled CIPET as Consultant for providing technical and training services in Plastic Engineering & Technology.

Main objectives of the Institute are :

- Effective training & manpower development in different disciplines of Plastics Engineering & Technology;
- Oganise conventional and advanced level training programmes for up gradation of skill and knowledge of personnel from the plastics industries;
- Provide technical services to the industries in the areas of Design / Fabrication of Tools, Moulds / Dies, Machinery and Equipment. Computer Aided Design / Manufacturing / Engineering (CAD / CAM / CAE) services, Testing anti Quality Control, Consultancy and Advisory Services;
- Application development in different areas of plastics & its allied products;
- R&D in the field of Plastics Engineering & Technology with a focus on implementing best manufacturing practices in small / medium scale industries to produce quality products.

During 2005-06, a loan agreement was signed worth US$ 12.3 Million by Govt. of India with Organization of Petroleum Exporting Countries (OPEL) for capacity building of CIPET Centres in thrust areas. The Project implementation is under progress and would be completed by 2008.

Project Proposal for “Setting up of “Plastics Recycling Waste Management Centre (PWMC)” at Guwahati at a total project cost of Rs. 7.80- crores was approached by Govt. of India in 2007.

2. NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH

National Institution of Pharmaceutical Education and Research (NIPER) Maholi, is the first national level institute in pharmaceutical sciences with a proclaimed objective of becoming a Centre of excellence for advanced studies and research in Pharmaceutical sciences. The Government of India has declared NIPER as an ‘Institute of National Importance’. NIPER’s vision and mission is “Catering to excellence in education and research in Pharmaceutical sciences”. The Institute is conceived to provide leadership in pharmaceutical sciences and related areas not only within the country, but also to the countries in South East Asia, South Asia and Africa.

The Institute is having nine departments in different facets of pharmaceutical sciences offering Masters and doctoral degrees and post-doctoral training. In the area of Research and development, the Institute is currently working on malaria, leishmaniasis, tuberculosis and diabetes. Institute is also offering sectorial M.B.A. (Pharm). Until now 323 Masters and 48 Ph. D. students have been passed out. NIPER

students are received well both nationally as well as internationally. Institute has published more than 550 research publications and filed 50 patents (national as well as international). So fare the Institute has undertaken 166 projects.

In research and development programme, the emphasis is on areas which are relevant to our country e.g. Malaria, Tuberculosis, Leishmaniasis, Diabetes, and standardization of herbal products. In the area of Diabetes, Institute developed in vitro screening methods as well as several in-vivo models have been established. In the area of Tuberculosis and Malaria, some of our NCEs are showing promising results. India with about 8% world diversity is one of the storehouses of traditional knowledge and has good potential of becoming a global player in herbal medicine. In this area, Institute is involved in the standardization of herbal products and developing monographs for the Ayurvedic pharmacopoeia. Some of our leads are having good activity in vitro for the Chronic Obstructive Pulmonary Disease. The interaction with the pharmaceutical industry though encouraging, requires further impetus in these days of globalization. To improve this interaction, a number of national centres have been created.

The WHO accredited National Bio-availability Centre at NIPER is one of the two centres of the world to conduct the bio-availability studies in fixed dose combinations of Anti-TB drugs. NIPER has again taken lead to set up a center of impurity profile of bulk API to help the industry in their exports. Reference standards of the impurities are exported to USA as well as Japan. A new Technology Development Centre has also been established for developing process for Active Pharmaceutical ingredients of synthetic or herbal origin, and the center is having a good industrial interaction.

To meet the challenges of rural health sector and profession, Department of Pharmacy Practice has been created, which promotes rational use of drugs, establishing clinical Pharmacy services, monitoring medicine related problems, cost components and adverse drug reactions. This department has collaborative link with London School of Pharmacy, U.K. and this linkage is helping to develop long term functional skills for new as well as existing pharmacists so as to provide higher level of pharmacy services to the citizen of the country. Realizing the importance of sectorial MBA, Institute started a Masters program in Pharmaceutical Management and to two batches of MBA (Pharm.) have been received their degrees. Further, Masters' programme in Pharma conformities and M.Tech. (Pharmaceutical Technology-Biotechnology) have been started and the financial support received from DST and DBT, respectively.

The Department of Science and Technology (DST) under Pharmaceutical Research & Development Support Fund (PRDSF) supported formaking Good Laboratory Practices Compliance of the National Toxicology Centre, National Centre of Pharmacoinformatics, National Centre for Safety Pharmacology and Centre for Pharmaceutical Nanotechnology.

The Institute has been selected as a model agency in the capacity building project funded by the World Bank under the Government of India, Ministry of Health & Family Welfare for providing training to drug regulatory personnel, analysis and personnel from small-scale industry. The Institute intend to provide training to about 2000 professionals within five years. So far the Institute has conducted 42 training programmes and total numbers of 2038 professionals have been trained.

It is heartening to note that since inception of the institute several prestigious

awards and orations which includes S.S. Bhatnagar award, two Ranbaxy awards, two OPPI Scientist awards, Bioscience Award, Chemical Reserach Society of India Medal, two Fellows of Royal Society of Chemistry, Fellow of National Academy of Sciences, M.L. Khurana Oration, CDRI Oration, Surya kumari Prize etc. In a short time NIPER created a brand name for itself in the field of pharmaceutical sciences. The postgraduate students of Pharmaceutical Sciences and Pharmaceutical Management of NIPER are in great demand.

Looking into the high rising demand of highly trained Manpower by the Pharmaceutical Industry, an In principal approval has been accorded to setup and start course in four other NIPER at Ahmedabad, Hyderabad, Hajipur and Kolkata.

3. Institute of Pesticide Formulation of Technology (IPFT)

The Institute of Pesticide Formulation Technology (IPET), is an autonomous society set up in the year 1991 by the Govt. of India with the assistance of UNIDO / UNDP. The Institute is actively engaged in the areas of development of new, safer and environment friendly pesticide formulations and promotion and transfer of such technology to the industrial sector. IPFT has developed many new generation pesticide formulations namely. Suspension Concentrates (SC), Water Dispersible Granules (WG). Concentrated Emulsions (CE), Capsulated Suspensions having control released characteristics (CS), Ultra Low Volume Formulations (ULV), Micro-Emulsions (ME) and certain formulations specifically designed to suit the needs of the users. All these development are based on available indigenous raw material. The Institute is equipped with a Formulation Laboratory, an Analytical Laboratory, a Bio science Laboratory and a Pilot Plant to meet the requirements of the Industry for research and development of formulations technology.

The Institute also functions as the Technical Coordinator Unit (TCU) of the Regional Network of Pesticides for Asia and the Pacific (RENPAP) of UNIDO on user and environment friendly pesticide formulation technology and quality assurance. The Institute also provides, on behalf of the Government of India, the secretarial assistance and logistic support to the RENPAP.

GEOLOGICAL STRUCTURE

The geological regions broadly follow physical features and may be grouped into three regions: the Himalayas and their associated group of mountains, the Gangetic Plain and the Peninsular Shield.

The Himalyan mountain belt to the north and the Naga-I Ushai mountain in the east, are the regions of mountain-building movement. Most of this area, now presenting some of the most magnificent mountain seenery in the world was under marine conditions about 60 crore years age. In a series of mountain-building movements commencing about seven crore years ago, the sediments and the basement rocks rose to great heights. The weathering and erosive agencies worked on these to produce the relief seen today. The Indo-Ganga plains are a great alluvial tract that separates the Himalayas in the north from the Peninsula in the south.

The Peninsula is a region of relative stability and occasional seismic disturbances Highly metamorphased rocks of the earliers periods, dating back as far as 380 crore years, occur in the area; the rest being covered by the coastal-bearing Gondwana formations, lava flows belonging to the Deccan Trap formation and yunger sediments.

SCIENCE & TECHNOLOGY PROGRAMME

Introduction : Science & Technology programme of the Ministry of Mines was initiated in 1978 with the view to encourage research and development of indigenous technolgoy in the minerals and non-ferrous metal sectors. Till now 137 projects have been completed and 7 projects are under implemention.

The underlying principle behind this programme had been the utilization of the available mineral resources in a judicious, economically efficient and environmentally sustainable manner. An important component of this programme had been the selection of research and development projects of national priorities including those related to benefication of the lean ores, techniques for extracting metals from mine wastes and plant tailings being by products.

Project proposals from various Government institutions, public sector undertakings universities and other research organizations engaged in the mineral and mining sectors are reviewed by a group of experts of Project Evaluation & Review Committee (PERC). Suitable projects of national priorities and thrust areas are approved by a high level Standing Scientific Advisory Group (SSAG).

AUTONOMOUS BODIES

Three autonomous Bodies had been setup under the Science & Technology programme for undertaking the research and development work in their respective fields, which are :

(a) National Institute of Rock Mechanies (NIRM) : To provide consultancy in mining and civil engineering sectors.

(b) National Institute of Miners' Health (NIMH) : To address exclusively to the occupational health problems of miners due to their long exposure to the mining environment.

(c) Jawaharlal Nehru Aluminium Research Development & Design Centre (JNARDDC) : To cater to the research and development activities related to the bauxite, alumina, aluminum and downstream industry.

MINERAL EXPLORATION AND DEVELOPMENT

A number of organizations are engaged in the exploration and development of mineral resources in India. These include Geological Survey of India (GSI), Mineral Exploration Corporation Limited (MECL), Indian Bureau of Mines (IBM), the public sector undertakings under the administrative control of the Ministry of Mines, and some disinvested companies in which the Government holds some stake.

GEOLOGICAL SURVEY OF INDIA

Geological Survey of India (GSI) is a premier national scientific survey and research organization and is also the principal provider of basic earth science information to the Government, Industry and general public as well as responsive participant in international geoscientific fora. Set up in 1851, the GSI over the years, has expanded its role in economic and social development of the country. The vibrant steel, coal, metals, cement and hydel power industries, bear testimony to the GSI’s relevance in the national context. Management of risks due to natural hazards such as floods, landslides and earthquakes, defining and delineating areas prone to environmental

degradation and providing geological inputs to optimize developments in the transport and communication sectors have rapidly become important functions of the survey. GSI's role has crossed the shoreline of the country to include the Exclusive Economic Zone (EEZ) in the surrounding ocean and also in the icy continent of Antarctica for geoscientific studies and inventory of resources. Government of India has declared GSI as the 'Nodal Agency' on landslide studies. It has grown into one of the largest scientific organizations in the country with a present strength of 10,821 as on 31st December. 2006 against a sanctioned strength of 11,420.

GSI's main focus is on development of minerals like gold, diamond, base metals, coal and lignite besides ferrous and industrial refractory minerals, etc. Creation and updating of national geoscientific information and knowledge base through ground geological, geophysical and geochemical mapping, marine and airborne survey and concept oriented thematic mapping/studies, geotechnical investigations related to water resources development, geo-environmental investigations, natural hazards studies and disaster management including, seismotectonic and landslides zonation studies are other areas of activity. GSI is the primary agency for augmentation of National Mineral Resources Inventory. Research and development in earth science is another area of activity of GSI. GSI NET and PORTAL remains one of the thrust areas in the field of Information Technology (IT). GSI website (www.gsi.gov.in) disseminates updated Information. One of the major activities of GSI is compilation and digitization of geological maps of whole country on 1:50,000 scale for archival and dissemination, which is at almost completion stage and will be soon available through GSI PORTAL to the public.

MINERALS

India is richly endowed with many minerals. Under the Constitution, mineral rights and administration of mining laws are vested in the respective State Governments. The Central Government, however, regulates the development of mines and minerals under the Mines and Minerals (Development and Regulation) (MMDR)Act, 1957 and the rules framed thereunder. The MMDR Act, 1957 came into force on 1.6.1958 and a number of amendments have been carried out in 1972, 1986,1994 and 1999. This staute empowers the Central Government to formulate rules for:

(i) the grant, renewal, etc. of reconnaissance permits, prospecting licences and mining leases for major minerals viz. Mineral Concession Rules, 1960 framed under Section 13 of MMDR Act, 1957.

(ii) the conservation and development of minerals, viz. Mineral Conservation and Development Rules, 1988 framed under Section 18 of the MMDR Act, 1957 for major minerals. These Rules are not applicable to atomic, fuel and minor minerals

(iii) Granite Conservation and Development Rules, 1999 for conservation and systematic development of granite resources in the country. These Rules have been framed under Section 18 of the MMDR Act, 1957.

(iv) Marble Development and Conservation Rules (MDCR), 2002 for conservation and systematic development of marble resources in the country. These Rules have been framed under Section 18 of the MMDR Act, 1957. Planning Commission had set up a High Level Committee under the Chairmanship of Shri Anwarul Hoda, Member, Planning Commission to review the National Mineral Policy and suggest amendments in the MMDR Act, 1957. The High Level Committee has submitted its report to the Central Government. The

High Level Committee Report is available on the website of Planning Commission.

MINERAL RESOURCES

The classification of reserves / resources of various minerals based on United Nations Framework Classification (UNFC) as on 1.4.2005 has been updated. The UNFC consists of a three dimensional system with the 3 axes :

- Geological Assessment
- Feasibility Assessment and
- Economic Viability.

UNFC is a three-digit code based system, wherein the economic viability axis represent the first digit, the feasibility axis represent the second digit and the geologic axis represent the third digit. Each of these three axis have further codes in decreasing order.

The economic viability have codes 1, 2 and 3 in decreasing order. Similarly the feasibility assessment have codes 1, 2 and 3. The geological assessment have 4 codes, i.e. 1. (Detailed exploration), 2 (General exploration) , 3 (Prospecting) and 4 (Reconnaissance). Thus the highest category of resources under UNFC system will have the code (111) and lowest category the code (334). The various terms used in this classification are as follows:

Total Mineral Resources : Reserve plus remaining resource comprise the Total Mineral Resource.

(a) Mineral Reserves : Economically mineable part of measured and / or indicated mineral resource. :

i) Proved Mineral Reserves (111) and

ii) Probable Mineral Reserves (121) & (122)

(b) Mineral Resources : It is the balance of the Total Mineral Resources which have not been identified as a Mineral Reserve.

i) Measured Mineral Resources - (331)

ii) Indicated Mineral Resources – (332)

iii) Inferred Mineral Resources – (333)

iv) Reconnaissance Mineral Resources – (334)

v) Prefeasibility Mineral Resources – (221) & (222)

vi) Feasibility Mineral Resources – (211)

The principal minerals found in the country along with their estimated reserves / resources are given below:

COAL

Coal is the main source of energy in the country and accounts for about 67 per cent of the country's commercial requirement. It is also an essential input in steel and carbo-chemical industries.

COAL RESERVES

As a result of exploration carried out down to a depth of 1200m by the Geological Survey of India and other agencies, a cumulative total of 2,55,246 million tonnes of coal resources have been estimated in the country as on 1st January, 2007.

The State-wise / distribution of coal resources and its categorisation are given in table 11.1 :

TABLE 11.1 : STATE-WISE DISTRIBUTION OF COAL

(Million Tonnes)

State	Proved	Indicated	Inferred	Total
Andhra Pradesh	8475	6328	2658	17461
Arunachal Pradesh	31	40	19	90
Assam	314	27	34	375
Bihar	0	0	160	160
Chhattisgarh	9973	27035	4442	41450
Jharkhand	36881	31094	6339	74314
Madhya Pradesh	7584	9259	2934	19777
Maharashtra	4856	2822	1992	9670
Meghalaya	118	41	300	459
Naglanad	4	1	15	20
Orissa	17464	30239	14296	61999
Uttar Pradesh	766	296	0	1062
West Bengal	11454	11810	5071	28335
Total	**97920**	**118992**	**38260**	**255172**

Production

Coal Production (All India) during 2006-07 was 430.47 millino tones (provisional) [Coal India Limited (CIL) 360.93 million tonnes, Singareni collieries Company Limited (SCCL) 37.71 million tonnes, Captive collieries 31.83 million tonnes].

Coal was allocated to major sectors viz power, cement, steel on the basis of recommendations of Standing Linkage Committee (Long Term) for power and current and sponge iron units. Quarterly allocation of coal for movement is done on recommendations of Standing Linkage Committee (Short Term) for power and cement. Coal India Limited allocates Coal to Steel sector and other Non-core consumers. Off-take of coal during 2005-06 and 2006-07 to major sectors of the economy is given below :

OFFTAKE OF COAL (SECTORWISE) FROM CIL, SCCL AND OTHERS

(In million tonnes)

Year	Power	Steel	Cement	Fertilizer	Others	Total
2005-2006	289.45	16.69	15.22	1.57	24.55	347.48
2006-2007	297.37	16.51	14.62	2.92	55.42	386.84

PROJECTS AND PLANNING

The coal projects costing up to Rs. 150 crores can be sanctioned by the Board of Directors of Coal India Limited (CIL), and coal projects costing up to Rs. 100 crores can be sanctioned by the Board of Directors of Northern Coalfields Limited (NCL),

Western Coalfields Limited (WCL), South Eastern Coalfields Limited (SECL), and Mahanadi CoalfieldsLimited (MCL) subject to the certain conditions.

As on 31.12.2006, out of total 487 mining projects of Coal India Limited (CIL) each costing Rs. 2 crores & above, 355 proejcts stand completed (including projects where coal reserves has since been exhausted) and 132 projects under various stage of implementation. Out of these 132 projects, 103 are on schedule and 29 are delayed. In Singareni Collieries Company Limited (SCCL), out of total 96 mining projects, 54 have been completed and out of the remaining 42 projects, 33 are on schedule and 9 are delayed.

At the Government level ongoing projects each costing Rs. 20 crores & above are being monitored. As on 31.12.2006, there are 129 such projects (Mining & Non Mining) under implementatino in Coal India Limited (CIL), Singareni Colieries Company Limited (SCCL) and Neyvell Lignite Corporation Limited (NLC). With a sanctioned capital of Rs. 21.573.73 crore the capacity of these 129 projects is 231.447 millino tones per year.

Coal Mines (Nationalisation) Act

Coal Mines (Nationalisation) Act, 1973, was initially amended in June 1993 followed by subsequent amendment, to allow captive mining of coal for :-

i) production of iron and steel;

ii) generation of power,

iii) washing of coal obtained from a mine;

iv) production of cement

v) underground coal gasification

Ministry of Coal has so far allocated 161 coal blocks with a geological reserves of about 36.3 billion tonnes to both public and private sector companies engaged in generation of power, production of iron & steel and cement as well as for commercial mining by Government / State PSUs.

COAL CONSERVATION

Conservation of coal enjoins maximum recovery of in-situ reserves of coal. The aspect of conservation of coal is taken into account right from the planning stage and maximum recovery is ensured during the implementation stage.

Mechanised opencast mining is presently the commonly adopted in India is an important technology for coal production of thick seam from shallow depth. This is also important from the conservation pont of view since the percentage recovery by this technolgoy is much higher. The dominane of this technology can be understood from the fact that it now contributes more than 80 per cent of total coal production. This trend is likely to continue to near future also. Further, the thick seam which were earlier developed by Board and Pillar method or other methods of underground mining and had standing on pillars for long in absence of a suitable technology for extraction, have now, in many cases, become extractable by opencast method of mining with HEMM equipment of suitable type in some mines of WCL, BCCL, CCL and ECL under shallow cover.

Longwall and continuous mining technology yields higher percentage of recovery (70 per cent to 80 per cent) with higher rate of output compared with other methods of underground mining. These method have been implemented in some mines of Coal India Limited as well as of SCCL. However due to difficult geo-

mining conditions prevalent in India, large-scale adoption of longwall technology has not been possible.

With the improvement in roof support technology uisng mechjanized bolting with resin bolts, it has been possible to maintain wider gallery span and extract seams under bad roof conditions more efficiently resulting in improved conservatino of coal.

The Coal Conservation and Development Act, 1974 provides for imposition of excise duty on coal despatches for meeting activities like conservation of coal, development and development of coal mines execution of stowing and other operations for the safety in coal mines and reserach work connected with conservatino and utilization of coal etc., assistance in mining operation.

SAFETY & WELFARE

Special efforts to improve the standard of safety in the coal industry have brought down the rate of fatalities per million tonne of output in Coal India Limited from 2.62 in the year 1975 to 0.17 in the year 2007 (31.03.2007). A Standing Committee on Safety regularly reviews safety standards in coalmines.

Coal India Ltd. had 4.73 lakh employees as on 1st January, 2005 and the coal industry employs over seven lakh workers. Since the nationalization of coalmines, welfare of coal miners by way of providing facilities like housing, water supply, medical care, education, etc., is being given greater allention.

LIGNITE

Lignite reserves in India have been estimated at around 38,756 millino tonnes as on 1st April, 2007. Out of this, 4,150 million tonnes are in the Neyveli area of Cuddalore district in Tamil Nadu of which about 2,831 million tonnes has been proved. Geological reserves of about 1,658 millino tonnes of lignite have been identified in Jayamkondacholapuram of Trichy district in Tamil Nadu. In Mannargudi and East of Veeranam (Tamil Nadu), geological reserves of around 23,099.77 millino tonnes and 1,342.45 millino tonnes of lignite have been estimated respectively. Lignite reserves have been identified in Rajasthan, Gujarat, Jammu and Kashmir and Kerala to the extent of 4,311.43 million tonnes, 2,662.75 million tonnes, 27.55 million tonnes and 1.15 million tones respectively.

Lignite reserves at Neyveli are exploited by Neyveli Lignite Corporation Ltd. (NLC), Incorporated as a privat limited company in 1956, NLC was wholly-owned by the Government and converted into a public limited company with effect from 30th July, 1959. Over the years, it has acquired considerable expertise and has established itself as a premier organisation in the field of lignite-mining and lignite based power generation. NLC is an integrated compled consistng of three lignite mines and three thermal power stations, NLC has also planned to establish more lignite based power products in the States of Rajasthan and Gujarat.

During 2006-07, NLC produced 210.14 lakh tonnes of lignite from its three lignite mines and generated 15,792.49 million units of power from three power stations located at Neyveli. NLC has obtained ISO certification, i.e. ISO 9001:2000 Quality Management System (QMS), ISO 14001:2004 Environment Management System (EMS) and ISO 18001:1999 Occupational Health and Safety Management Systems (OHSAS) for its Mines and thermal Power Stations.

BAUXITE

The Total Resources of bauxite as per UNFC in the country are placed at 3290 million tonnes as on 1.4.2005. These resources include 899 million tonnes of Reserves and 2391 million tonnes of 'Remaining resources'. The Resources include 539 million tonnes of Proved reserves and 360 million tonnes of Probable reserves. Orissa, Andhra Pradesh, Gujarat, Chhattisgarh, Madhya Pradesh, Jharkhand and Maharashtra are the principal States where bauxite deposits are located. Major deposits are concentrated in the east coast bauxite deposits of Orissa and Andhra Pradesh.

CHROMITE

As per United Nations Framework Classification (UNFC), the total resources of Chromite as on 1.4. 2005 are 213 million tonnes, comprising 66 million tonnes reserves (31%) and 147 million tonnes of remaining resources (69%). In India 95% resources are located in Orissa and the remaining 5% resources are distributed in Manipur and Karnataka, and meagre quantities in the states of Jharkhand, Maharashtra, Tamil Nadu and Andhra Pradesh.

COPPER

The total resources of copper ore as per UNFC are placed at 1.39 billion tonnes with a metal content of 11418 thousand tonnes . Of these 369.49 million tonnes with a total metal content of 4383.97 thousand tonnes fall under 'Reserves' while balance 1.02 billion tonnes with a metal content of 7033.75 thousand tonnes are 'Remaining resources'. Rajasthan is credited with the largest resources of copper ore at 668.5 million tonnes with a metal content of 3982 thousand tonnes followed by Madhya Pradesh and Jharkhand. Copper resources are also established in Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Meghalaya, Orissa, Sikkim, Tamil Nadu, Uttarakhand and West Bengal.

GOLD

There are three important gold fields in the country, namely, Kolar Gold Field, Kolar district and Hutti Gold Field in Raichur district (both in Karnataka) and Ramgiri Gold Field in Anantpur district (Andhra Pradesh). As per UNFC total resources of gold ore (primary) in the country as on 1.4.2005 were estimated at 390.29 million tonnes with a Metal content of 490.81 tonnes. Out of these, 19.25 million tonnes with a Metal content of 85.12 tonnes were placed under reserves category and the remaining 371.03 million tonnes with a Metal content of 405.69 tonnes under resources category.

IRON ORE

India posses haematite resources of 14,630 million tonnes of which 13,916 million tonnes (95%) resources are distributed mainly in Orissa, Jharkhand, Chhattisgarh, Karnataka and Goa. The resources of very high grade ore are limited and are restricted mainly in Bailadila sector of Chhattisgarh and to a lesser extent in Bellary-Hospet area of Karnataka and Barajamda sector in Jharkhand and Orissa. Magnetite resources are placed at 10,619 million tonnes of which only 59 million tonnnes constitute reserves located mainly in Goa, Rajasthan and Jharkhand. The remaining 10,560 million tonnes (99%), magnetite resources are under remaining resources category mainly in Karnataka (74%) and Andhra Pradesh (14%). Other deposits are located in Goa, Rajasthan, Tamil Nadu, Kerala, Assam, Jharkhand, Nagaland, Meghalaya, Bihar, Maharashtra and Orissa.

LEAD-ZINC

Lead-Zinc resources are located in Rajasthan, Bihar, Maharashtra, Madhya Pradesh, Andhra Pradesh, Gujarat, Uttarakhand, West Bengal, Orissa, Sikkim, Tamil Nadu and Meghalaya. The total resources as on 1.4.2005 as per UNFC are estimated at 522.58 million tonnes with a metal content of 7207 thousand tonnes of lead metal and 24260 thousand tonnes of zinc metal. Of these, 125.75 million tonnes with a metal content of 2591 thousand tonnes of lead metal and 11093 thousand tonnes of zinc metal fall under 'Reserves' while balance 396.83 million tonnes are with a metal content of 4617 thousand tonnes lead metal and 13167 thousand tonnes of zinc metal classified as 'Remaining resources'.

MANGANESE

The total resources of manganese ore in the country are placed at 379 million tonnes. Out of these, 138 million tonnes are categorized as reserves and the balance 241 million tonnes in the remaining resources. Main deposits fall in Orissa, followed by Karnataka, Madhya Pradesh, Maharashtra and Goa. Minor occurrences of manganese are in Andhra Pradesh, Rajasthan, Gujarat, Jharkhand and West Bengal.

NICKEL

As per United Nations Framework Classification (UNFC) the total resources of Nickel ore have been estimated at 189 million tonnes. About 92% resources i.e. 174.48 million tonnes are in Orissa and remaining 8% are distributed in Jharkhand, Nagaland and Karnataka.

TUNGSTEN

As per UNFC, the total resources of tungsten ore in the country have been estimated at 87.39 million tonnes with a WO_3 content of 142094 tonnes. All these resources are placed under 'Remaining Resources' category. The main deposits are at Degana, Rajasthan. It also occurs in Karnataka, Andhra Pradesh, Maharashtra, Haryana, West Bengal, Uttarakhand and Tamil Nadu.

BARYTES

The total resources of barytes in India as on 1.4.2005 as per UNFC are placed at 74 million tonnes of which about 46% (34 million tonnes) are in 'Reserves' category and 54% (40 million tonnes) are in 'Remaining Resources' category. The Mangampet deposit occurring in Cuddapah district (Andhra Pradesh) is the single largest deposit in the world. Andhra Pradesh alone accounted for more than 90% country's resources. Minor occurrences of barytes are located in Rajasthan, West Bengal, Madhya Pradesh, Tamil Nadu, Himachal Pradesh, Maharashtra, Jharkhand, Uttaranchal, Karnataka and Haryana.

DIAMOND

Diamond deposits occur in three types of geological settings such as kimberlite pipes, conglomerate beds and alluvial gravels. The main diamond bearing areas in India are Panna belt in Madhya Pradesh, Munimadugu-Banganapalle conglomerate in Kurnool district, Wajrakarur kimberlite pipe in Anantapur district, the gravels of Krishna river basin in Andhra Pradesh and dimendiferous kimbelite in Raipur, Bastar and Raigarh districts in Chhattisgarh. Reserves have been estimated in Panna belt, Madhya Pradesh, Krishna Gravels in Andhra Pradesh and in Raipur district,

Chhattisgarh. As per the United Nation's Framework Classification (UNFC) system , all India total resources of Diamond are placed at around 4582 thousand carats. Out of which reserves in proved category are 606 thousand carats and in probable category are 600 thousand carats. The new kimberlite fields have been discovered recently in Raichur-Gulbarga districts of Karnataka.

DOLOMITE

As per UNFC total resources of all grades of dolomite are placed at 7533 million tonnes, out of which Reserves are 985 million tonnes and the balance i.e. 6548 million tonnes are in the 'Remaining Resources'.

Dolomite occurrences are widespread in almost all parts of the country. The major share of about 88 percent resources is located in the states of Madhya Pradesh, Andhra Pradesh, Chhattisgarh, Orissa, Karnataka, Gujarat, Rajasthan and Maharashtra.

FIRECLAY

Fireclay occurs as a bedded deposit, mostly associated with coal measures of Gondwana and Tertiary periods. Important deposits are associated with Jharia and Raniganj coalfields in Jharkhand and West Bengal, Korba coalfield in Chhattisgarh and Neyveli Lignite field in Tamil Nadu. Notable occurrences of fireclay not associated with coal measures are known in the state of Gujarat, Jabalpur region of Madhya Pradesh and Belpahar-Sundergarh areas of Orissa. As per UNFC as on 1.4.2005, the total resources of fireclay are about 705 million tonnes in India. Out of these Proved reserves are 27 million tonnes and Probable reserves are 32 million tonnes. It is necessary to assess the fireclay reserves on priority basis, especially those associated with coal measures in the leasehold areas. The reserves of fireclay are substantial but reserves of high grade (non-plastic) fireclay containing more than 37% alumina are limited.

FLUORSPAR

As per UNFC, the total resources of fluorite in the country as on 1.4.2005 were estimated at 20.16 million tonnes. Out of these, 9.21 million tonnes were placed under 'Reserves' category and the remaining 10.95 million tonnes under Remaining Resources' category. Major deposits of Fluorspar are located in Gujarat, Rajasthan, Chhattisgarh and Maharashtra.

GYPSUM

The total resources of mineral Gypsum in India as per UNFC as on 1.4.2005 were estimated at 1,237 million tonnes. Of these 69 million tonnes have been placed under 'reserve' and 1,168 million tonnes under 'Remaining Resources'. Category-wise, 41 million tonnes were proved reserves and 28 million tonnes probable reserves. The production of gypsum is confined to Rajasthan, Jammu & Kashmir, Gujarat and Tamil Nadu. Rajasthan is the main producer of gypsum followed by Jammu & Kashmir.

GRAPHITE

As per the UNFC, the total resources of graphite in the country as on 1.4.2005 are placed at about 168.77 million tonnes comprising 10.75 million tonnes in the reserves category and remaining 158.02 million tonnes under resources category.

ILMENITE

The reserves of ilmenite are 461.37 million tonnes as per Department of Atomic Energy. Ilmenite occurs mainly in beach sand deposits right from Ratnagiri (Maharashtra) to coast in Kerala, Tamil Nadu & Orissa. The mineral is also found in Andhra Pradesh, Bihar, and West Bengal.

KAOLIN

India possesses fairly large resources of china clay. The total resources as per UNFC are 2595.66 million tonnes. Out of these resources, 222 million tonnes are placed in reserves Category and are distributed mainly in Kerala, West Bengal, .Rajasthan, Orissa, Karnataka, Jharkhand, Gujarat, Meghalaya, Andhra Pradesh and Tamil Nadu.

LIMESTONE

The total resources of limestone of all categories and grades as per UNFC as on 1.4.2005 are estimated at 175345 million tonnes of which 12715 million tonnes are under 'Reserves' category and 162630 million tonnes are under 'Remaining Resources' category. Karnataka is the leading state followed by Andhra Pradesh, Gujarat, Rajasthan, Meghalaya, Chhattisgarh, Madhya Pradesh, Orissa, Maharashtra and Uttarakhand.

MICA

Important mica bearing pegmatite occurs in Andhra Pradesh, Jharkhand, Maharashtra, Bihar and Rasjasthan. As per UNFC, the total resources of Mica in the country are estimated at 393855 tonnes, out of which only 68570 tonnes are placed under 'Reserves' category. 'Remaining Resources' are placed at 325285 tonnes. Rajasthan accounts for about 51% resources, followed by Andhra Pradesh (28%) Maharashtra (17%) and Bihar (3%).

MAGNESITE

The total resources of magnesite as per UNFC as on 1.4.2005 are about 338 million tonnes, of which reserves (Proved + Probable) and remaining resources are 76 million tonnes and 262 million tonnes, respectively. Substantial quantities of resources are established in Uttarakhand (68%) followed by Rajasthan (16%) and Tamil Nadu (14%). Andhra Pradesh, Himachal Pradesh, Jammu & Kashmir, Karnataka and Kerala contribute for the balance.

KYANITE AND SILLIMANITE

The total resources of kyanite and sillimanite as per UNFC in the country as on 1.4.2005 are 103 million tonnes and 74 million tonnes, respectively. Out of these the reserves i.e. (Proved +Probable) categories are 1.4 million tonnes for kyanite and 11 million tonnes for sillimanite. Kyanite deposits are located in Maharashtra, Karnataka, Jharkhand, Rajasthan, Andhra Pradesh and Tamil Nadu. Sillimanite resources are in Orissa, Tamil Nadu, Uttar Pradesh, Kerala, Andhra Pradesh, Assam and West Bengal with minor occurrences in Assam, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya and Rajasthan.

PHOSPHATE MINERALS

Deposits of phosphorites are located in Madhya Pradesh, Rajasthan, Uttarakhand, Uttar Pradesh and Gujarat. Besides, apatite deposits of commercial importance are reported from Jharkhand, West Bengal, Andhra Pradesh, Tamil Nadu and Rajasthan.

The total resources of apatite as per UNFC system in the country as on 1.4.2005 are placed at 26.86 million tonnes, out of which 6 million tonnes are reserves, 61% of which are located in West Bengal. The total resources of rock phosphate as per UNFC are placed at 305 million tonnnes , out of which 53 million tonnes are placed under 'reserves' and 252 million tonnes under 'remaining resources' category. Bulk reserves are located in Rajasthan.

OTHER MINERALS

Other minerals occurring in significant quantities in India are bentonite (Rajasthan, Gujarat, Jharkhand and Jammu & Kashmir), corundum (Karnataka, Andhra Pradesh, Rajasthan, Tamil Nadu and Chhattisgarh), calcite (Andhra Pradesh, Rajasthan, Madhya Pradesh, Tamil Nadu, Haryana, Karnataka, Uttar Pradesh and Gujarat), fuller's earth (Rajasthan, Jharkhand, Bihar, Andhra Pradesh, Tamil Nadu, Maharashtra, West Bengal and Karnataka), garnet (Tamil Nadu, Orissa, Andhra Pradesh, Rajasthan and Kerala), pyrites (Jharkhand, Rajasthan, Karnataka, Himachal Pradesh and Andhra Pradesh), steatite (Rajasthan, Uttar Pradesh, Kerala, Maharashtra and Madhya Pradesh), wollastonite (Rajasthan and Gujarat), zircon (beach sand of Kerala, Tamil Nadu, Andhra Pradesh and Orissa) and quartz and silica minerals are widespread and occur in nearly all states. Besides, the country has vast marble, slate and sandstone deposits. Granite is mainly mined in Tamil Nadu, Karnataka, Andhra Pradesh and Rajasthan; marble in Rajasthan, Gujarat and Uttar Pradesh; slate in Chhattisgarh, Madhya Pradesh, Haryana and Andhra Pradesh and sandstone in Rajasthan.

INDIAN BUREAU OF MINES

Indian Bureau of Mines (IBM) established on 1st March, 1948, is a multi-disciplinary scientific and technical organisation under Ministry of Mine with statutory and developmental responsibilities for conservation and systematic exploitation of mineral resources other than coal, petroleum and natural gas, atomic minerals and minor minerals.

IBM have its headquarter at Nagpur, 3 Zonal Offices, 12 Regional Offices and 2 Sub-Regional offices spread all over the country. Apart from the Modern Mineral Processing Laboratory Pilot Plant constructed with the UNDP assistance at Nagpur, two Regional Ore Dressing Laboratories and Pilot Plants are in operation at Ajmer and Bangalore.

The responsibility and activities of IBM are guided by an eleven-point charter laid down by the Government of India in February 2003. Thus the current functions of IBM include, promoting conservation of mineral resources by way of inspection of mines; scrutiny and approval of mining plans, mining schemes and mine closure plans; conducting environmental studies and related activities; evolving technologies for upgradation of low grade ores and identifying avenues for their utilisation providing technical consultancy services on mining, geology, mineral processing and environment; undertaking scientific, techno-economic research oriented studies in various aspects of mining, geological, ore beneficiation and environmental studies; preparing mineral maps with forest overlays and National Mineral Inventory of mineral resources; functioning as a data bank for mines and minerals and generating technical and statistical publications; imparting training to scientific, technical and other cadres of IBM and also to persons from the mining industry and other agencies for human resources development; promoting and monitoring community

development activities in the mining areas advising the Central and State Governments on all aspects of mineral industry, trade and legislation.

PUBLIC SECTOR UNDERTAKINGS UNDER THE ADMINISTRATIVE CONTROL OF MINISTRY OF MINES

National Aluminium Company Limited (NALCO)

National Aluminium Company Limited (NALCO), largest integrated Alumina-Aluminium Plant Complex in India, was incorporated on 7th January, 1981 with its registered office at Bhubaneswar and First phase expansion of the company at an investment of Rs. 4200 Crore was completed in 2004. The Alumina-Aluminium Complex has the installed capacity of 4.8 Million Tonnes Per Year (MTPY) Bauxite Mine at Panchapatmali (District Koraput), 1.575 MTPY aluminium Refinery at Damanjodi (District Koraput), 0.345 MTPY Aluminium smelter alongwith the 8X120 MW CPP at Angul, all in Orissa and Port Handling Facilities at Visakhapatnam (Andhra Pradesh) for export of Alumina and import of caustic soda. The Company also utilizes Kolkata and Paradeep Ports for export of Aluminium.

Second phase expansion of NALCO's Integrated Alumina-Aluminium Complex, at an outlay of Rs. 4091.51 crore, is under implementation since October 2004, and is scheduled to be completed in 50 months. With this expansion, capacity of Bauxite Mine, Refinery, Smelter and Captive Power Plant will increase from 4.8 MTPY to 6.3 MTPY, 1.575 MTPY to 2.1 MTPY, 0.345 MTPY to 0.46 MTPY and 960 MW to 1200 MW, respectively.

Hindustan Copper Limited (HCL)

Hindustan Copper Limited was incorporated on 9th November 1967 under the Companies Act, 1956. HCL is the country's only integrated producer of refined copper and has on its rolls 5442 employees (as on 01.05.2007).

Main units of the Company are: (i) Khetri Copper Complex in Rajasthan, (ii) Indian Copper Complex in Jharkhand, (iii) Malanjkhand Copper Project in Madhya Pradesh and (iv) Taloja Copper Project in Maharashtra.

Major activities of HCL include mining, ore beneficiation, smelting, refining and casting of refined copper metal into downstream products. The company markets copper cathodes, copper wire bar, continuous cast copper rod and by-products, such as anode slime (containing gold, silver, etc.), copper sulphate and sulphuric acid.

The total installed annual capacity of HCL is 47,500 tonnes of refined copper. During 2006-2007, HCL produced 30231 tonnes of metal in concentrate and 39661 tonnes of refined copper & posted a net profit (after tax) of Rs.310.46 Crores (unaudited), which is the highest since inception.

Mineral Exploration Corporation Limited (MECL)

Mineral Exploration Corporation Limited was established as public sector undertaking by the Government in 1972 with the main objective of systematic exploration of minerals and bridging the gap between the discovery of mineral prospect and its eventual exploitation. Its major functions are to plan, promote, organize and implement programmes for the exploration of mineral resources. MECL has its headquarters at Nagpur.

During 2006-07, the overall physico-financial performance has been

remarkable. The gross revenue of MECL was Rs. 84.41 crore and a gross margin of Rs. 9.96 crore was achieved. It has recorded a net profit of Rs. 5.01 crore (Before tax). A total of 2105 million tonnes of reserves for coal, lignite, copper, zinc lead-zinc, gold and shell limestone have been added in National Mineral inventory, during 2006-07.

Bharat Gold Mines Limited (BGML)

Bharat Gold Mines Limited with registered office at Kolar Gold Fields, was incorporated as a public sector company under the Ministry of Mines, on 1 April 1972. It was engaged in mining and production of gold from its captive mines. The company was referred to the Board for Industrial and Financial Reconstruction (BIFR) who gave its verdict in June 2000 to wind up BGML in public interest. The verdict of BIFR was upheld by Appellate Authority for Industrial and Financial Reconstruction (AAIFR). The company was closed after the Ministry of Labour, accorded permission for closure of BGML w.e.f. 1 March 2001. After prolonged litigation the Division Bench of High Court of Karnataka in its order dated 26 September 2003 has also upheld the winding up / closure orders passed by BIFR / AAIFR and Ministry of Labour. The Court has made certain recommendations which are under consideration of the Government.

Government of India, on 27.7.2006, have approved a proposal regarding Special Terminal Benefit Package (STBP) for Bharat Gold Mines Limited ex-employees, sale of houses, calling of global tender for sale of assets and giving purchase preference to the Employees' Co-operative Society / Society's Company subject to the approval of the High Court of Karnataka (Company Court) and viability of the project. Company Application has been filed in the Hon'ble High Court of Karnataka (Company Court) which is being perused STBP amount has been distributed to the ex-employees of BGML and work on sale of houses at the rates as ordered by the High Court of Karnataka(Company court), is going on. An Inter Ministerial Group (IMG) has also been constituted to oversee the tendering process of BGML and obtain technical, financial and legal advise whenever necessary from a consultant to be appointed.

Disinvested Companies in which the Government holds the stake

Bharat Aluminium Company Limited (BALCO)

Bharat Aluminium Company Limited (BALCO) was incorporated on 27th November, 1965 as a Central Public Sector Undertaking with an integrated Alumina / Aluminium Complex and a 270 MW Captive Power Plant at Korba presently in Chhattisgarh. The Alumina Plant had 2,00,000 Tonnes Per Annum (TPA) capacity and the Smelter had a capacity of 1,00,000 TPA.

Government of India disinvested 51 % equity in the Company along with the transfer of management control in favour of M / s Sterlite Industries (India) Limited with effect from 2nd March, 2001.

The Company has embarked on a major expansion project which envisaged increasing the Smelter capacity from 1,00,000 TPA to 3,45,000 TPA and the capacity of the Captive Power Plant from the 270 MW to 810 MW.

Hindustan Zinc Limited (HZL)

Hindustan Zinc Limited was incorporated on 10th January 1966 to take over operations of the erstwhile Metal Corporation of India Limited, to develop mining

and smelting capacities to substantially meet the demand of zinc and lead metals. HZL' s operation are broad-based and its activities range from exploration, mining and ore processing to smelting and refining of lead, zinc together with recovery of by-products like silver, cadmium and sulphuric acid. Government of India disinvested its 26% equity in HZL in favour of M/s. Sterlite Opportunities and Ventures Ltd. (SOVL) on 28th March, 2002 and the management control of the company was also transferred to SOVL on 11 th April, 2002. Subsequently, SOVL acquired 20% equity shares of HZL from the market through its open offer. On 11th November, 2003, Government of India further off-loaded 18.92% of its equity in HZL in favour of SOVL in terms of the Shareholders' Agreement. The current shareholding of the SOVL in HZL is 64.92% and that of Government of India is 29.54%.

HZL with its headquarters at Udaipur operates three lead-zinc mines (Zawar Group of Mines in Udaipur, Rajpura Dariba Mine in Rajsamand, Rampura Agucha Mine in Bhilwara Districts, all in Rajasthan) with a total lead-zinc ore production capacity of about 5.85 million tones per annum. HZL also operates three smelters (Debari Zinc smelter in Udaipur, Chanderiya Lead-Zinc smelter in Chittorgarh districts, both in Rajasthan and Vizag zinc Smelter in Andhra Pradesh) with a combined capacity of 4.11 lakh tones per annum of zinc and 85,000 TPA of lead. HZL produced 348,567 tonnes of zinc and 50187 tonnes of lead metals during 2006-07.

PRODUCTION OF SELECTED MINERALS, 2003-04 & 2005-06

(Value in Rs. Crore)

Mineral	Unit	2004-05		2005-06(P)		2006-2007(E)	
		Qty	Value	Qty	Value	Qty	Value
All Minerals			**81374.87**		**83938.26**		**87866.35**
Fuel			**60511.00**		**61484.78**		**63938.76**
Coal	M.Tonnes	383	30433.52	407	32354.30	430	34245.42
Lignite	M.Tonnes	30	2191.00	30	2152.11	31	2262.92
Natural Gas(Utilised)	M.C.M.	30820	8940.12	31223	9040.74	31800	9209.28
Petroleum (crude)	M.Tonnes	34	18946.36	32	17937.63	33	18221.14
Metallic Minerals			**9940.39**		**11486.08**		**12858.71**
Bauxite	th. tonnes	11964	251.67	12335	286.04	13075	303.22
Chromite	th. tonnes	3621	849.61	3423	977.87	4101	1171.68
Copper Conc.	th. tonnes	137	213.07	124	224.56	115	259.84
Gold	Kg.	3526	194.30	3050	208.19	2937	199.61
Iron Ore	th. tonnes	145942	7402.90	154436	8690.53	172296	9695.12
Lead Conc	th. tonnes	82	65.27	98	70.82	109	89.37
Manganese ore	th. tonnes	2386	554.89	2003.00	508.19	1882	477.48
Zinc Conc.	th. tonnes	666	399.88	893	495.61	1020	647.29
Other met. Minerals			8.80		24.27		15.10
Non-Metallic Minerals			**2684.48**		**2728.40**		**2829.88**
Ball Clay	th. tonnes	637	11.79	351	4.94	712	10.09
Barytes	th. tonnes	1159	50.52	1190	44.77	1459	73.76
Diamond	Carats	78316	37.62	44170	23.34	2769	1.98
Dolomite	th. Tones	4339	91.57	4428	107.63	4433	104.19

Fire clay *	th. tonnes	663	9.07	486	7.68	561	6.60
Garnet (Abrasive)	th. tonnes	642	15.33	680	19.58	883	22.15
Gypsum	th. tonnes	3685	50.20	3137	38.97	2207	29.68
Kaolin	th. tonnes	934	109.13	1097	134.14	1356	173.02
Laterite	th. tonnes	950	9.09	931	9.77	751	7.88
Lime shell	th. tonnes	138	7.22	110	5.44	121	6.93
Lime stone	M. tonnes	166	1794.20	170	1901.98	179	2018.28
Magnesite	th. tonnes	384	36.40	351	48.86	221	32.20
Phosphorite	th. tonnes	1723	292.84	1373	221.24	1163	190.73
Pyroxenite	th. tonnes	266	8.74	338	11.12	239	7.85
Sand (others)	th. tonnes	1496	4.54	1183	4.05	1249	4.09
Silica Sand	th. tonnes	1962	24.47	2345	26.91	2074	24.47
Sillimanite	th. tonnes	31	11.53	32	17.05	31	15.49
Steatite	th. tonnes	684	33.50	627	29.11	576	29.10
Wollastonite	th. tonnes	170	12.91	129.00	9.87	133	10.92
Other non-metallic minerals			**74.31**		**61.95**		**60.47**
Minor Minerals			**8239.00**		**8239.00**		**8239.00**

Figures rounded off.

(R) : Revised
(P): Provisional and based on monthly returns to the extent available with IBM
(E) : Estimated

* : Excludes the production of Fireclay, if any recovered incidental to coal mining.

MICRO AND SMALL ENTERPRISES (MSE) SECTOR

Worldewide, the micro and small enterprises (MSEs) have been accepted as the engine of economic growth and for promoting equitable development. The MSEs constitute over 90% of total enterprises in most of the economies and are credited with generating the highest rates of employment growth and account for a major share of industrial production and exports. In India too, the MSEs play a pivotal role in the overall industrial economy of the country. It is estimated that in terms of value, the sector accounts for about 39 per cent of the manufacturing output and around 33 per cent of the total exports of the country. Further, in recent years the MSE sector has consistently registered higher growth rate compared to the overall industrial sector. The major advantage of the sector is its employment potential at low capital cost. As per available statistics, this sector employs an estimated 31 million persons spread over 12.8 million enterprises and the labour intensity in the MSE sector is estimated to be almost 4 times higher than the large enterprises.

To help the MSEs in meeting the challenges of globalization, the Government has taken serveral initiatives and measures in recent years. First and foremost among them is the enactment of the 'Micro, Small and Medium Enterprises Development Act, 2006', which aims to facilitate the promotion and development and enhance the competitiveness of MSMEs. The Act has come into force from 2nd October 2006. Other major initiatives taken by the Government are setting up of the National Manufacturing Competitiveness Council (NMCC) and the National Commission of Enterprises in the Unorganised Sector (NCEUS). Further, in recognition of the fact that delivery of credit continues to be a serious problem for MSEs, a 'Policy Package for Stepping up Credit to Small and Medium Enterprises (SME) was

announced by the Government with the objective to double the credit flow to the sector within a period of five years. The government has also announced a comprehensive package for promotion of micro and small enterprises, which comprises the proposals/schemes having direct impact on the promotion and development of the micro and small enterprises, particularly in view of the fast changing economic environment, wherein to be competitive is the key of success.

The Ministry of Micro, Small and Medium Enterprises (MSME) performs its tasks of formulation of policies and implementation of programmes mainly through two Central organizations. These are :

Micro, Small and Medium Enterprises Development Organisation

The Micro, Small and Medium Enterprises Development Organisation (earlier known as Small Industries Development Organisation) set up in 1954, functions as an apex body for sustained and organised growth of micro, small and medium enterprises. As an apex / nodal organ, it provides a comprehensive range of facilities and services to the MSMEs though its network of thirty Small Industries Service Institutes (SISIs), twenty-eight branch SISIs, four Regional Testing Centres (RTCs), seven Field Testing Stations (FTSs), six Process-cum-Product Development Centres (PPDCs), eleven Tool Rooms and two Specialised Institutes namely, Institute for Design of Electrical Measuring Instruments (IDEMI) and Electronics Service and Training Centre (ESTC).

NATIONAL SMALL INDUSTRIES CORPORATION LTD.

National Small Industies Corporation, Since its inception in 1955 has been working with its mission of promoting, aiding and fostering the growth of micro & small enterprises. It has been working to promote the interest of micro & small enterprises and to enhance their competitiveness by providing integrated support services under Marketing, Technology, Finance and Support services.

The Corporation has been introducing several new schemes from time to time for meeting the change aspirations of the micro & small enterprises. The main objective of all these schemes is to promote the interest of the micro & small enterprises and to put them in competitive and advantageous positions. The schemes of NSIC have been found to be very useful in stimulating the growth of micro and small enterprises in the country. The information pertaining to the schemes planned to be continued/implemented in the XI plan period by the Corporation with Government support is given here under.

1. PERFORMANCE & CREDIT RATING SCHEME

NSIC, in consultation with Rating Agencies and Indian Banks Association, has formulated Performance & Credit Rating Scheme for Small Industries. The Scheme is aimed to create awareness amongst small enterprises about the strengths and weakness of their existing operations and to provide them an opportunity to enhance their organisational strengths and credit worthiness. The rating under the scheme serves as a trusted third party opinion on the capabilities and creditworthiness of the small enterprises. An independent rating by an accredited rating agency has a good acceptance from the Banks/Financial Institutions, Customers/Buyers and Vendors. Under this Scheme, rating fee to be paid by the small enterprises is subsidized for the first year only and that is subject to maximum of 75% of the fee or Rs. 40000/-, whichever is less.

II MARKETING ASSISTANCE SCHEME

This is an on going old scheme. Marketing, a strategic tool for business development, is critical for the growth and survival of small enterprises in today's intensely competitive market. One of the major challenges before the small enterprises is to market their products / services.

NSIC acts as a facilitator to promote marketing efforts and enhance the competency of the small enterprises for capturing the new market opportunities by way of organizing participating in various domestic & international exhibitions / trade fairs, buyers-seller meets, intensive campaigns seminars and consortia formation. NSIC helps small enterprises to participate in International / national exhibitions / trade fairs at the subsidized rates to exhibit and market their products. participation in these events provides small enterprises an exposure to the national / international markets.

Buyer Seller Meets are being organized to bring bulk buyers / government departments and micro & small enterprises together at one platform. This enables micro & small enterprises to know the requirements of bulk buyers on the one hand and help the bulk buyers to know the capabilities of micro & small enterprises for their purchases. Intensive campaigns and seminars are organized all over the country to disseminate / propagate about the various schemes for the benefit of the small enterprises and to enrich the knowledge of small enterprises regarding latest developments, quality standards etc.

In addition, the Ministry has three national Level Entrepreneurship Development Institutes namely, Indian Institute for Entrepreneurship (IIE), Guwahati, National Institute for Entrepreneurship and small Business Development (NIESBUD), Noida and National Institute for Micro, Small and Medium Enterprises (NIMSME), Hyderabad.

Definition of Micro, Small and Medium Enterprises

A) Manufacturing Enterprises

i. A micro enterprise, where the investment in plantand machinery does not exceed twenty five lakh rupees;

ii. A small enterprise, where the investment in plant and machinery is more than twenty five lakh rupees but does not exceed five crore rupees; and

iii. A medium enterprise, where the investment in plant and machinery is more than five crore rupees but does not exceed ten crore rupees.

B) Service Enterprises

i. A micro enterprise, where the investment in equipment does not exceed ten lakh rupees;

ii. A small enterprise, where the investment in equipment is more than ten lakh rupees but does not exceed two crore rupees; and

iii. A medium enterprise, where the investment in equipment is more than two crore rupees but does not exceed five crore rupees.

Performance of Micro and Small Enterprise Sector

As per the third All-India Census held for the year 2001-02, there were 105.21 lakh enterprises (Registered and Unregistered) in the country, out of which 13.75 lakh were registered working enterprises and 91.46 lakh unregistered enterprises. Their

contribution to production was Rs. 2,82,270 crore and to employment was 249.32 lakh persons. It is estimated that during 2006-07 (provisional), the number of units has increased to 128.44 lakh from 123.42 lakh in the previous year registering a growth rate of 4.1 per cent. The value of production at current prices is estimated to have increased by 15.8 per cent to Rs. 4,97,842 crore from Rs. 4,29,796 crore. The employment is estimated to have increased to 312.52 lakh from 299.85 lakh persons in the previous year.

The MSE sector has been registering a higher growth rate than the overall industrial sector in the past few years consistently.

Infrastructure Development

For setting up of industrial estates and to develop infrastructure facilities like power distribution network, water, telecommunication, drainage and pollution control facilities, roads, banks, raw materials, storage and marketing outlets, common service facilities and technological back up services, etc., for MSMEs, the Integrated infrastructural Development (IID) Scheme was launched in 1994. The Scheme covers districts, which are not covered under the Growth Centres Scheme. The scheme covers rural as well as urban areas with a provision of 50 per cent reservation for rural areas and 50 per cent industrial plots are to be reserved for the tiny units. The Scheme also provides for upgradation / strengthening of the infrastructural facilities in the existing old industrial estates. The estimated cost to set up an IID Centre is Rs. 5 crore (excluding cost of land). Central Government provides 40 per cent (upto a maximum of Rs 2 crore) in case of general States and upto 80% (upto a maximum of Rs. 4 crore) for North east Region (including Sikkim), J&K, H.P. and Uttrakhand, as grant and remaining amount could be loan from SIDBI / Banks / financial Institutions or the State Funds. For the promotion and development of MSEs in the country, cluster approach is one of the thrust areas of the Ministry in the 11th Plan. The IID Scheme has been subsumed under the Micro and Small Enterprise Cluster Development Programme (MSECDP). All the features of the IID Scheme have been retained and will be covered as ''New Clusters'' under MSECDP.

Technology Upgradation in MSE Sector

The opening up of the economy has exposed MSE sector to global and domestic competition. With a view to enhancing the competitiveness of this sector. The Government has taken various measures, which include: (i) Assistance to Industry Associations for setting up of testing Centres and to State Governments and their autonomous bodies for modernization / expansion of their Quality Marking Centres; (ii) Regional Testing Centres and Field Testing Stations to provide testing services and services for quality upgradation; (iii) Implementation of Micro and Small Enterprise Cluster Development Programme (MSECDP), under which 91 clusters have been taken up, including national Programme for the Development of toy, stone, machine tools and hand-tool industry in collaboration with UNIDO; (iv) A Scheme of promoting ISO 9000 / 14001 Certification under which SSI units are given financial support by way of reimbursing 75 per cent of their expenditure to obtain certification subject to a maximum of Rs. 75,000 per unit; and (v) Setting up of Biotechnology Cell in SIDO.

Further, a scheme on Credit Linked Capital Subsidy was launched in the year 2000 to facilitate technology upgradation of Small Enterprises. Under the Scheme, capital subsidy of 12 percent was provided on institutional finance availed by the

SSI units for induction of well established and improved technology inselect sub-sectors / products up to a maximum ceiling of Rs. 40 lakh. The Scheme has been revised w.e.f. 29th September 2005. Under the revised Scheme, the rate of upfront capital subsidy has been enhanced to 15 per cent and ceiling on loan has been raised to Rs. 1 crore, the admissible capital subsidy is calculated with reference to purchase price of plant and machinery, instead of the term loan disbursed to the beneficiary unit.

Measures for Export Promotion

Export promotion from the MSE sector has been accorded a high priority. Following schemes have been formulated to help MSEs in exporting their products: (i) Products of MSE exporters are displayed in international exhibitions and the expenditure incurred is reimbursed by the Government; (ii) To acquaint MSE exporters with latest packaging standards, techniques, etc., training programme on packaging for exporters are organised in various parts of the country in association with the Indian Institute of Packaging; (iii) Under the MSE Marketing Development Assistance (MDA) Scheme, assistance is provided to individuals for participation in overseas fairs / exhibitions, overseas study tours, or tours of individuals as member of a trade delegation going abroad. The Scheme also offers assistance for (a) sector specific market study by MSE Associations / Export Promotion Councils / Federation of Indian Export Organisation; (b) Initiating / contesting anti-dumping cases by MSE Associations; and (c) reimbursement of 75 per cent of the one time registration fee and annual fee (recurring for first three years) charged by GS1 India (formerly EAN India) for adoption of Bar Coding.

Entrepreneurship and Skill Development

The Ministry conducts Entrepreneurship Development Programmes (EDPs) to cultivate the skill in unemployed youths for setting up micro and small enterprises. Further, under the Management Development Programmes (MDPs), existing MSE entrepreneurs are provided training on vaious areas to develop skills in management to improve their decision-making capabilities resulting in higher productivity and profitability. To encourage more entrepreneurs from SC / ST, women and physically challenged groups, The Ministry of MSME provides a stipend of Rs. 500 per capita per month to the SC / ST, women and physically challenged persons for the duration of the training.

AGRO AND RURAL INDUSTRIES

The long-term development of the Indian economy depends on the effective exploitation of the productive potential of the rural non-farm sector and development of the Indian industries. Accordingly, development of village industries based on local raw material, skills and technology has been identified as an important activity for the gainful employment in the rural non-farm sector and for overall growth of the national economy. For promotion of agro and rural industries in rural areas and small towns, various policies and programmes are being implemented by the government of India through Khadi and Village Industries Commission (KVIC) and Coir Board and the Prime Minister's Rozgar Yojana (PMRY) with the active cooperation and participation by the Reserve Bank of India, other banks and the State Governments.

For the development of Khadi and village industries (KVI) sector, the Government is implementing various programmes / schemes through KVIC, viz.,

Rural Employment Generation Programme (REGP) for assisting eligible applicants in setting up village industries units, Rebate Scheme under which rebate is provided to kahdi institutions on the sale of khadi and khadi products to make the price of khadi competitive with other textiles, Interest Subsidy Eligibility Certificate (ISEC) scheme for providing bank loans to khadi and polyvastra units at subsidized rates of interest, Rural Industries Service Centre (RISC) for setting up of common facility centres (CFCs) to provide infrastructure support and service to village industries, Scheme of Fund for Regeneration of traditional Industries (SFURTI) for development of clusters in khadi, village industries and coir sectors, Products development, Design Intervention and Packaging (PRODIP) for improved design and packaging of khadi garments, Research & Development and other support services, viz., marketing export promotion, exhibition at district, State, zonal and national level, design facility, brand building etc. As a result of these efforts, production which was at the level of Rs. 16.47 crore (Khadi Rs. 5.54 crore and village industries (VI) Rs. 10.93 crore) in 1955-56, has increased to the level of Rs. 14531.69* crore (khadi Rs. 474.80 crore and VI Rs. 1456.89 crore) in 2006-07. Similarly employment level has also increased to 88.52* lakh person (Khadi 8.83 lakh and VI 79.79 lakh).

* Provisional

RURAL EMPLOYMENT GENERATION PROGRAMME

Under the Rural Employment Generation Programme (REGP), capital subsidy in the form of margin money is provided for setting up labour-intensive village industries in rural areas and small towns. The objective of this programme is to provide productive employment to the people in the seareas, there by also help reduce migration from the rural to urban areas. The benefits of the scheme are available to all individuals, institutions, societies / trusts for projects costing up to Rs. 25 lakh except the activities included in the negative list like khadi, meat processing, tobacco production, crop cultivation, products that cause environmental problems, etc. The programme allows all other types of industries including cyber cafes, food processing, hitech industries, etc. The beneficiary is required to invest his own contribution of 10 per cent of the project cost (5 per cent in case of weaker sections). For weaker sections, viz. SC / ST / Women / physically handicapped / Ex-servicemen and minority community beneficiary / institution and for hill, border and tribal areas, North East Region, Sikkim, Andaman & Nocbar Islands, Lakshdweep, there is a higher margin money grant. This scheme is being implemented through public sector, regional rural banks and on a selective basis through cooperative banks and private sector scheduled commercial banks.

Under the REGP, 2,62,442 units have been set up and 39.68 lakh additional job opportunities created since its inception in 1995 upto March 2007.

NEW INITIATIVES

In order to strengthen KVI sector, some new initiatives have also been taken viz., Revamping of Khadi and Village Industries Commission, awarding deemed Export Promotion Council (EPC) status to KVIC, Setting up of Mahatma Gandhi Institute for Rural Industrialization (MGIRI), Wardha for strengthening rural industrialization and enhancing the opportunities form meaningful and productive employment in rural areas, categorization of Khadi institutions for streamlining the payment of rebate, released of interest subsidy, ready to use khadi mission, setting up of Central Sliver Plants in order to facilitate continuous off take of roving by khadi institutions,

etc. Besides, KVIC implements the Rural Industries Consultancy Service (RICS) scheme for providing guidance to prospective entrepreneurs which includes proceurement of raw material and machinery marketing etc.

COIR INDUSTRY

As a result of the efforts of the Government in promoting the coir industry, India has retained its position as the largest producer and supplier of coir and coir products in the world market. The share of India in the global production of coir is 80 per cent (in term of fibre). Although Srilanka has a monopoly in the supply of coir fibre to the world market, India continues to be the major supplier of coir yarn and coir products in global trade.

The policy / programmes undertaken by the Coir Board for promotion of coir industry are scientific, technological and economic research for development of coir industry; collection of statistics relating to export and internal consumption of coir and coir products; development of new products and designs, publicity for promotion of exports and internal sales, marketing of coir and coir products in India and abroad, preventing unfair competition among producers and exporters, assisting in setting up of units for the manufacturing of products, promoting co-operative organizations among producers of husk, coir fibre, coir yarn and manufactures of coir products, ensuring remunerative returns to producers and manufactures, etc.

The total turnover of coir and coir products during 2006-07 was approximately Rs. 2100 crore (Provisional). the export of coir and coir products of Rs. 595 crore has been recorded with a growth of 17.07 per cent during 2006-07 as compared to 2005-06.

PRIME MINISTER'S ROZGAR YOJANA (PMRY)

To provide employment opportunities to the educated unemployed youth in urban as well as rural areas, the Government is implementing Prime Minister's Rozgar Yojana (PMRY) in the country from 02 October, 1993. Under this scheme, educated unemployed youth between the age group of 18-35 years (upper age limit relaxable up to 45 years for women, SC / ST / Ex-servicemen and physically handicapped) who have passed 8th standard examination and their family in come is less than Rs. 1,00,000 per annum are eligible to avail of Bank loan and Government subsidy for all economically viable activities.

Project costing up to Rs. 2.00 lakh for business / service sector and Rs. 5.00 lakh for industry sector are covered under this scheme. Eligible persons can join together in a partnership to get assistance for project up to Rs. 10 lakh, subsidy being limited to 15 per cent of project cost subject to a ceiling of Rs. 12500 per entrepreneur. The margin money contribution from the beneficiary varies from 5 per cent to 16.25 per cent of the project cost. Loans for projects are required to be given by Bank without collateral security. Preference is given to women beneficiaries / candidates. Each entrepreneur whose loans is sanctioned is provided training under the scheme. The scheme is implemented through District Industries Centres, State Directorates of Industries and the Banks.

According to the information received from the RBI, 3,14,876 cases were sanctioned during 2005-06, against which loans were disbursed in 2,67,281 cases (provisional figures) under PMRY. During 2006-07, 2,74,016 cases (provisional) of loan were sanctioned out of which loans were disbursed in 1,94,576 cases

(provisional). An estimated 0.36 lakh employment opportunities have been generated in 2006-07.

A target of generating 4.125 lakh job opportunities under PMRY has been fixed for 2007-08.

SCHEME OF FUNDS FOR REGENERATION OF TRADITIONAL INDUSTRIES (SFURTI)

A scheme titled the 'Scheme of Funds for Regeneration of Traditional Industries'' (SFURTI) has been notified in October 2005 for the integrated development of traditional clusters of Khadi, coir and village industries, including leather and pottery. The main objective of SFURTI is to establish a regenerated holistic sustainable and replicable medal of integrated cluster-based development of traditional industries. Under SFURTI, it is proposed to develop around 100 clusters (25 clusters for Khadi, 50 clusters for village industries and 25 clusters for coir industries) over a period of five years. The Scheme Steering Comittee of SFURTI has approved 122 clusters (34 Khadi clusters, 26 coir clusters and 62 village industry clusters) so far.

19 Justice and Law

THE Constitution of the Republic of India guarantees, besides other rights, protection of life and personal liberty and provides adequate safeguards against the arbitrary deprivation thereof by the State.

Adoption of a Constitution by India in 1950 did not disturb continuity of existing laws and unified structure of courts. Unity and uniformity of the judicial structure were preserved by placing such areas of law as criminal law and procedure, civil procedure, will, succession, contract including special form of contract, but not including contract relating to agricultural land, registration of deeds and documents, evidence, etc., in the Concurrent List.

SOURCE OF LAW

The main sources of law in India are the Constitution, statutes (legislation), customary law and case law. Statutes are enacted by Parliament, State legislatures and Union Territory legislatures. Besides, there is a vast body of laws known as subordinate legislation in the form of rules, regulations as well as bye-laws made by Central / State governments and local authorities like municipal corporations, municipalities, gram panchayats and other local bodies. This subordinate legislation is made under the authority conferred or delegated either by Parliament or State or Union Territory legislatures concerned. Judicial decisions of superior courts like Supreme Court and High Courts are important sources of law. Decisions of Supreme Court are binding on all courts within the territory of India. Local customs and conventions which are not against statute, morality, etc., are also recognised and taken into account by courts while administering justice in certain spheres.

ENACTMENT OF LAWS

The Parliament is competent to make laws on matters enumerated in the Union List. State legislatures are competent to make laws on matters enumerated in the State List. Parliament alone has power to make laws on matters not included in the State or Concurrent List. On matters enumerated in the Concurrent List, laws can be made by both Parliament and legislatures. But in the event of repugnancy, law made by Parliament shall prevail and law made by State legislature, to the extent of repugnancy, be void unless the latter law having been reserved for consideration of President, has received his assent, and in that event it shall prevail in that state.

JUDICIARY

At the apex of the entire judicial system exists Supreme Court of India with a High Court for each State or group of States, and under High Courts; there is a hierarchy of subordinate courts. Panchayat courts also function in some States under various names like Nyaya Panchayat, Panchayat Adalat, Gram Kachehri, etc., to decide civil and criminal disputes of petty and local nature. Different State laws provide for jurisdiction of these courts.

Each state is divided into judicial districts presided over by a district and sessions judge, who is the principal civil court of original jurisdiction and can try all offences including those punishable with death. He is the highest judicial authority

in a district. Below him, there are courts of civil jurisdiction, known in different states as munsifs, sub-judges, civil judges and the like. Similarly, criminal judiciary comprises chief judicial magistrate and judicial magistrates of first and second class.

SUPREME COURT

The Supreme Court of India consists of 26 Judges (including the Chief Justice of India). The judges hold office until they attain the age of 65 years. The Supreme Court of India has original jurisdiction in any dispute arising: (a) between the Government of India and one or more States; or (b) between the Government of India and any State or States on the one side and one or more states on the other; or (c) between two or more States.

An appeal shall lie to the Supreme Court from any judgment, decree or final order of a High Court in the territory of India, whether in a civil, criminal or other proceeding.

HIGH COURTS

High Court stands at the head of the State's Judicial Administration. There are 21 High Courts in the country, three having jurisdiction over more than one State. Among the Union Territories, Delhi alone has a High Court of its own. Other six Union Territories come under jurisdiction of different State High Courts. Each High Court comprises a Chief Justice and such other Judges as the President may, from time to time, appoint. The Chief Justice of a High Court is appointed by the President in consultation with the Chief Justice of India and the Governor of the state. The procedure for appointing of the High Courts judges is the same except that the recommendation for the appointment of Judges in the High Court is initiated by the Chief Justice of the High Court concerned. They hold office up to 62 years of age. To be eligible for appointment as a judge, one must be a citizen of India and should have held a judicial office in India for 10 years or must have practiced as an advocate of a High Court or two or more such courts in succession for a similar period.

Each High Court has power to issue any person or authority and Government within its jurisdiction, direction, orders or writs, including writs which are in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari, for enforcement of Fundamental Rights and for any other purpose. This power may also be exercised by any High Court exercising jurisdiction in relation to territories within which the cause of action, wholly or in part arises for exercise of such power, even if the seat of such Government or authority or residence of such person is not within those territories. The total sanctioned strength of Judges and additional judges in different High Courts is 678 against which 587 Judges were in position as on 26 June 2006. Table 19.1 gives the seat and territorial jurisdiction of the High Courts.

TABLE 19.1 : JURISDICTION AND SEAT OF HIGH COURTS

Name	Year	Territorial Jurisdiction	Seat
Allahabad	1866	Uttar Pradesh	Allahabad (Bench at Lucknow)
Andhra Pradesh	1954	Andhra Pradesh	Hyderabad
Bombay	1862	Maharashtra, Goa, Dadra and Nagar	Mumbai (Benches at Nagpur, Panaji

		Haveli and Daman and Diu	and Aurangabad)
Calcutta	1862	West Bengal	Kolkata (Circuit Bench at Port Blair)
Chhattisgarh	2000	Bilaspur	Bilaspur
Delhi	1966	Delhi	Delhi
Guwahati*	1948	Assam, Manipur, Meghalaya, Nagaland, Tripura, Mizoram and Arunachal Pradesh	Guwahati (Benches at Kohima, Aizawl, Imphal, Shillong, Agartala and Itanagar)
Gujarat	1960	Gujarat	Ahmedabad
Himachal Pradesh	1971	Himachal Pradesh	Shimla
Jammu and Kashmir	1928	Jammu and Kashmir	Srinagar and Jammu
Jharkhand	2000	Jharkhand	Ranchi
Karnataka#	1884	Karnataka	Bangalore
Kerala	1958	Kerala and Lakshadweep	Ernakulam
Madhya Pradesh	1956	Madhya Pradesh	Jabalpur (Benches at Gwalior and Indore)
Madras	1862	Tamil Nadu and Pondicherry	Chennai (Bench at Madurai)
Orissa	1948	Orissa	Cuttack
Patna	1916	Bihar	Patna
Punjab and Haryana@	1966	Punjab, Haryana and Chandigarh	Chandigarh
Rajasthan	1949	Rajasthan	Jodhpur (Bench at Jaipur)
Sikkim	1975	Sikkim	Gangtok
Uttarakhand	2000	Uttarakhand	Nainital

* Originally known as Assam High Court, renamed as Guwahati High Court in 1971.

Originally known as Mysore High Court, renamed as Karnataka High Court in 1973.

@ Originally known as Punjab High Court, renamed as Punjab and Haryana High Court in 1966.

Each High Court has powers of superintendence over all courts within its jurisdiction. It can call for returns from such courts, make and issue general rules and prescribed forms to regulate their practices and proceedings and determine the manner and form in which book entries and accounts shall be kept.

SUBORDINATE COURTS

The structure and functions of subordinate courts are more or less uniform throughout the country. Designations of courts connote their functions. These courts deal with all disputes of civil or criminal nature as per the powers conferred on them. These courts have been derived principally from two important codes prescribing procedures, i.e., the Code of Civil Procedure, 1908 and the Code of Criminal Procedure, 1973 and further strengthened by local statutes. As per direction of Supreme Court in WP (Civil) 1022 / 1989 in the All India Judges Association case, a uniform designation has been brought about in the subordinate judiciary's judicial

officers all over the country viz., District or Additional District Judge, Civil Judge (Senior Division) and Civil Judge (Junior Division) on the civil side and on criminal side, Sessions Judge, Additional Sessions Judge, Chief Judicial Magistrate and Judicial Magistrate, etc., as laid down in the Cr.P.C. Appropriate adjustment, if any, has been made in existing posts by indicating their equivalent with any of these categories by all State Governments / UT Administrations.

Under Article 235 of the Constitution of India, the administrative control over the members of subordinate judicial service vests with the concerned High Court. Further in exercise of powers conferred under proviso to Article 309 read with Article 233 and 234 of the Constitution, the State Government shall frame rules and regulations in consultation with the High Court exercising jurisdiction in relation to such State. The members of the State Judicial Services are governed by these rules and regulations.

NATIONAL JUDICIAL ACADEMY

The National Judicial Academy has been set up by the Government of India to provide in-service training to Judicial Officers. The Academy was registered on 17 August 1993 under the Societies Registration Act, 1860. The Academy is located in Bhopal with its registered office in New Delhi. The National Judicial Academy building was inaugurated by the President of India on 5 September 2002.

The Academy will provide training and continuing education to judicial officers of States / UTs as well as ministerial officers working in the Supreme Court of India and the High Courts. The Academy will also function as a centre of excellence in judicial education, research and training.

The objectives of programmes of the Academy include Judicial Reform and Policy Development as well as Research Support Services for greater efficiency, fairness, access and productivity. It also includes improvements in Court administration and management for a litigant friendly justice system.

LEGAL AID

Article 39A of the Constitution of India provides for free legal aid to the poor and weaker sections of the society and ensures justice for all. Articles 14 and 22(1) of the Constitution also make it obligatory for the State to ensure equity before law and a legal system which promotes justice on the basis of equal opportunity to all. In 1987, the Legal Services Authorities Act was enacted by the Parliament, which came into force on 9 November 1995 to establish a nationwide uniform network for providing free and competent legal services to the weaker section of the society on the basis of equal opportunity. The National Legal Services Authority (NALSA) has been constituted under the Legal Services Authorities Act, 1987 to monitor and evaluate implementation of legal aid programmes and to lay down policies and principles for making legal services available under the Act.

In every State, a State Legal Services Authority and in every High Court, a High Court Legal Services Committee have been constituted. District Legal Services Authorities and Taluka Legal Services Committees have been constituted in the Districts and most of the Talukas in order to give effect to the policies and directions of the NALSA and to provide free legal services to the people and conduct Lok Adalats in the State.

Supreme Court Legal Services Committee has been constituted to administer

and implement the legal services programme insofar as it relates to the Supreme Court India.

FUNCTIONING OF NALSA

The NALSA issues guidelines for the State Legal Services Authorities to implement the Legal Aid Programmes and schemes throughout the country.

Primarily, the State Legal Services Authorities, District Legal Services Authorities, Taluka Legal Services Committees, etc., have been assigned the task of discharging the following two main functions on regular basis.

i) To provide Free Legal Services to the eligible persons; and

ii) To organise Lok Adalats for amicable settlement of disputes

FREE LEGAL SERVICES

The Free Legal Services include : (1) Payment of court fee, process fees and all other charges payable or incurred in connection with any legal proceedings; (2) Providing Advocate in legal proceedings; (3) Obtaining and supply of certified copies of orders and other documents in legal proceedings; (4) Preparation of appeal, paper book including printing and translation of documents in legal proceedings.

Eligible Persons for getting free legal services include : (1) Women and Children; (2) Members of SC / ST; (3) Industrial workmen; (4) Victims of mass disaster, violence, flood, drought, earthquake, industrial disaster; (5) Disabled persons; (6) Persons in custody; (7) Persons whose annual income does not exceed Rs 50,000; (8) Victims of trafficking in human beings.

LOK ADALATS

The Lok Adalat is a forum where the disputes / cases pending in the court of law or at pre-litigation stage are settled / compromised amicably. The Lok Adalat has been given statutory status under the Legal Services Authorities Act, 1987. Under this Act, an award made by a Lok Adalat is deemed to be a decree of a civil court and is final and binding on all parties and no appeal lies against thereto before any court.

Lok Adalats are being organised by the Legal Services Authorities / Committees on usual pattern, i.e., u / s 19 of the Legal Services Authorities Act, 1987 and also for matters at pre-litigative stage, under the guidance of NALSA. The following types of matters are being taken up:

1. Matrimonial / Family disputes
2. Criminal Compoundable Offence cases
3. Land Acquisition Cases.
4. Labour Disputes.
5. Workmen's compensation
6. Bank Recovery cases
7. Pension cases
8. Housing Board and slum clearance cases & Housing Finance cases
9. Consumer Grievance cases
10. Electricity matters
11. Telephone Bills disputes
12. Municipal matters including House Tax cases

13. Disputes with Cellular Companies viz. Airtel, Hutch, Tata Tele services, etc.

NALSA SCHEMES

The NALSA has formulated the following schemes to perform its other functions under the Legal Services Authorities Act, 1987.

1. LEGAL AID COUNSEL SCHEME : NALSA has initiated Legal Aid Counsel Scheme to provide meaningful legal assistance to undertrial prisoners, who feel handicapped in their defence on account of lack of resources or other disabilities and cannot engage a counsel to defend them. Now, Legal Aid Counsel have been attached to each Magisterial Court who provide assistance and defend any person who is not able to engage a Counsel, right from the stage he / she is produced in the court by the police.

2. COUNSELLING AND CONCILIATION SCHEME : NALSA has formulated a Counselling and Conciliation Scheme to encourage the settlement of disputes by way of negotiations and conciliation. Under this scheme, Counselling and Conciliation Centres are being set up in all the Districts of the country for guiding and motivating the litigants to resolve their disputes amicably. Such Centres have been set up in most of the districts.

3. SUPREME COURT MIDDLE INCOME GROUP SCHEME : This scheme has been formulated to provide legal services to the middle income class citizens, i.e., citizens whose annual income does not exceed Rs 2 lakh.

4. LEGAL LITERACY SCHEME : NALSA has formulated a strategy to provide basic and essential knowledge to the vulnerable groups so that they can understand the law and know the scope of their rights under the law and eventually assert their rights as a means to take action, uplift their social status and bring in social change.

NALSA has organised the following programmes to achieve its objectives to ensure equal opportunities of justice:

1. A Mobile Legal Aid Service on boat dedicated for the welfare of the villagers of the Sunderban Islands of West Bengal has been launched by NALSA on 3 September 2005. The Mobile Legal Aid Service is an activity of the permanent fishermen habitation of Sunderban area. The project aims to provide legal rights awareness, the legal literacy and the legal aid to the poor villagers. The major focus of the programme has been on capacity building for the marginalised fishermen of the villages in Sunderban Islands. A Mobile Legal Literacy Campaign ''Chuppi Todo'' for the tribal women of Jharkhand was launched on 20 August 2005 at Ranchi. A Mobile Legal Literacy Campaign was also launched on 14 January 2006 at Lucknow.
2. Legal Literacy Initiative to combat lynching and witch hunting of tribal women and protection of legal rights of tribal communities has been organised on 20 August 2005 at Ranchi, Jharkhand for the tribal people of the States of Bihar, West Bengal, Orissa, Chhattisgarh and Jharkhand. The aim of the Initiative is to safeguard the woman's life and her inherent nurturing capacities. A shift paradigm as regards the attitude of the man towards the woman in the village areas could mark the actual beginning of ''Woman Saving'' instead of "Witch Hunting''.

3. NALSA has launched an Initiative titled Project Combat to stop sacrifice of Girl Child for commercial sexual exploitation in the name of Devadasi Custom and on the Challenge faced by Society in Liberation of Devadasis from the Traditional Bondage and Stigma in the States of Andhra Pradesh, Tamil Nadu, Karnataka and Maharashtra. Devadasi (God's Slave Girl) cult has existed in India since long. This occupation of slave-girl degraded into temple prostitution in the present times. The Devadasis and their children have no access to rightful means of existence with dignity. This Initiative of NALSA is a step towards improvement of status of such groups in the society and provide legal aid and legal literacy to such a marginalised section so that the Constitutional Obligations are fulfilled.

Child Sex Tourism is a vice that is not easily recognised. Child Sex Tourism needs a concerted effort and also attaining the goals to eradicate a phenomenon which is on the rise, needs addressing on a large-scale including education, awareness, campaigning, creation of task forces, etc. The Coastal States like Goa, Kerala, etc., are suffering from a rapidly growing Child Sex Tourism. In order to make tourism industry, especially hospitality industry, aware of the vice, its reasons, causes and the measures to be taken to avoid the same, the NALSA organised a high level Decision Makers Forum on Child Rights on 5 February 2006 at Goa to Combat Commercial Sex Tourism and protect Child Rights in the State of Goa, Kerala and Rajasthan.

4. The Students are the future of the nation and they are full of enthusiasm and courage. Their enthusiasm is required to be channelised into the right direction so that they can become useful citizens. The NALSA planned to involve the students community from the schools, colleges, universities and centres of professional learning and launched SAPLING (Students Advocacy Programme Linking Institutes of Learning) on 29 January 2006 at Bangalore (Karnataka) for implementation of National Legal Literacy Mission.

The SAPLING aims to link the institutes of learning with NALSA's objectives of social justice and equality. The scheme envisages the concept of integration of students community in the social emancipation programmes for disadvantaged sections of the society such as women, children, labourers, disabled, minorities, Scheduled Castes and Scheduled Tribes.

5. For centuries, women have faced socio-economic exploitation and occupied an inferior status vis-a-vis her male counterpart in all spheres of life. Gender inequalities lead to gender based crimes, like that of rape, dowry deaths, female foeticide, molestation, etc. Despite various social reform movements, constitutional and legal provisions to uplift women in India, inequalities and discrimination are being faced by women everyday.

The NALSA has initiated to establish Women and Child Protection Units in each district of the country under the direct supervision of the District Judge for considering Women and Child related grievances and for providing speedy justice to them and to save them from exploitation. In most of the districts, Women and Child Protection Units have been established.

6. In order to sensitise the judicial system on the prevention of trafficking and HIV/AIDS on account of their legal and social prospective, the NALSA has initiated a national programme with support of UNDP - TAHA under the title Nyaya Sankalp.

7. The NALSA has accorded the highest priority to the challenges faced by the society in protection of the rights of persons suffering from physical and mental disabilities.

On the occasion of World Mental Health Day - 10th October every year, NALSA observes the National Legal Aid Week and organises Legal Rights Protection and Awareness Programmes for the people suffering from Mental Disabilities and for sensitisation of doctors and nurses. NALSA also observes U.N. International Day of Disabled Persons on 3rd December every year.

ATTORNEY-GENERAL

The Attorney General for India is appointed by the President and holds office during the pleasure of the President. He must be a person qualified to be appointed as a Judge of the Supreme Court. It is the duty of the Attorney-General of India to give advice to the Government of India upon such legal matters, and to perform such other duties of a legal character, as may be referred or assigned to him by the President, and to discharge the functions conferred on him by or under the Constitution or any other law. In the performance of his duties, he has the right of audience in all courts in India as well as the right to take part in the proceedings of Parliament, without the right to vote. In the discharge of his functions, the Attorney-General is assisted by the Solicitor-General and the Additional Solicitors-General.

LEGAL PROFESSION

In India, the law relating to legal profession is governed by the Advocates Act, 1961 and the rules framed thereunder by the Bar Council of India. It is a self-contained code of law relating to legal practitioners and provides for the constitution of State Bar Councils and Bar Council of India. A person enrolled as an advocate under the Advocates Act, 1961, is entitled to practice law throughout the country. And advocate on the roll of a State Bar Council may apply for transfer to the roll of any other State Bar Council in the prescribed manner. No person can be enrolled as an advocate on the rolls of more than one State Bar Council. There are two classes of advocates, namely, senior advocates and other advocates. An advocate with his consent, may be designated as a senior advocate, if the Supreme Court or a High Court is of the opinion that by virtue of his ability, standing at the Bar or special knowledge or experience in law, he deserves such distinction. A senior advocate cannot appear without an advocate-on-record in the Supreme Court or without some other advocate on the State Roll in any other court or tribunal. Standards of education have been prescribed for enrolment as an advocate. There are also rules regulating standards of professional conduct and etiquette and other matters. State Bar Councils have disciplinary jurisdiction over advocates whose names appear on their rolls. This subject to right of appeal to the Bar Council of India and a further right of appeal to the Supreme Court of India.

ADVOCATE'S WELFARE FUND

Social security in the form of financial assistance to junior lawyers and welfare scheme for indigent or disabled advocates has always been a matter of concern for the legal fraternity. Certain States enacted their own legislation on the subject. The Parliament enacted "Advocates Welfare Fund Act, 2001" applicable to the Union Territories and the States which do not have their own enactments on the subject, for consideration of "Advocates Welfare Fund" by the appropriate Government. This Act makes it compulsory of every advocate-affixed stamps of the requisite

value on every Vakalatnama filed in any court, tribunal or other authority. The sum collected by way of sale of ‘‘Advocates’ Welfare Fund Stamps’’ constitute an important source of the Advocates’ Welfare Fund.

All practising Advocates shall become members of the Advocates’ Welfare Fund on payment of an application fee and annual subscription. The Fund shall vest in and be held and applied by the Trustee Committee established by the appropriate Government. The Fund Shall, inter-alia, be used for making ex-gratia grant to a member of the fund in case of a serious health problem, payment of a fixed amount on cessation of practice and in case of death of a member, to his nominee or legal heir, medical and educational facilities for the members and their dependents, purchase of books and for common facilities for advocates.

NATIONAL TAX TRIBUNAL

The National Tax Tribunal Act, 2005 had been brought into force w.e.f. 28 December 2005. However, due to court cases the Tribunal has not yet become functional.

LAW COMMISSION OF INDIA

The 18th Law Commission was reconstituted on 1 September 2006 for a period of three years with Hon’ble Dr. Justice A.R. Lakshmanan as its Chairman. A.R. Lakshmanan has been appointed its Chairman w.e.f. 28.5.2007 and Dr. D.P. Sharma as its Member-Secretary w.e.f. 31 March 2006. The terms of reference of the 18th Law Commission are: (a) Review / Repeal of obsolete laws: (i) to identify laws which are no longer needed or relevant and can be immediately repealed; (ii) to identify laws which are in harmony with the existing climate of economic liberalisation which need no change; (iii) to identify laws which require changes or amendments and to make suggestions for their amendment; (iv) to consider in a wider perspective the suggestions for revision / amendment given by Expert Groups in various Ministries / Departments with a view to coordinating and harmonising them; (v) to consider references made to it by Ministries / Departments in respect of legislation having bearing on the working of more than one Ministry / Department; (vi) to suggest suitable measures for quick redressal of citizens grievances, in the field of law; (b) Law and Poverty: (i) to examine the Law which affect the poor and carry out post-audit for socio-economic legislation; (ii) to take all such measures as may be necessary to harness law and the legal process in the service of the poor; (c) to keep under review the system of judicial administration to ensure that it is responsive to the reasonable demands of the time and in particular to secure: (i) elimination of delays, speedy clearance of arrears and reduction in costs so as to secure quick and economical disposal of cases without affecting the cardinal principle that decisions should be just and fair; (ii) simplification of procedure to reduce and eliminate technicalities and devices for delay so that it operates not as an end in itself but as a means of achieving justice; (iii) improvements of standards of all concerned with the administration of justice; (d) to examine the existing laws in the light of Directive Principles of State Policy and to suggest ways of improvement and reform and also to suggest such legislation as might be necessary to implement the Directive Principles and to attain the objective set out in the Preamble to the Constitution; (e) to revise the Central Acts of General Importance so as to simplify them and to remove anomalies, ambiguities and inequities; (f) to recommend to the Government measure of bringing the statute book up-to-date by repealing obsolete laws and enactments or parts thereof which have outlived their utility; (g) to consider and to convey to the Government its views on any other subject relating to law and judicial

administration that may be referred to it by the Government through Ministry of Law and Justice (Department of Legal Affairs).

Various subjects were taken up by the Commission suo motu in view of the importance of the issues while some subjects were taken up on a reference from the Government / Supreme Court of India. The Commission has so far submitted 201 reports.

ENFORCEMENT AGENCIES

POLICE

The Police force in the country is entrusted with the responsibility of maintenance of public order and prevention and detection of crimes. Public order and police being state subjects under the Constitution, police is maintained and controlled by States.

The Police force in State is headed by the Director General of Police / Inspector General of Police. State is divided into convenient territorial divisions called ranges and each police range is under the administrative control of a Deputy Inspector General of Police. A number of districts constitute the range. District police is further sub-divided into police divisions, circles and police-stations. Besides the civil police, states also maintain their own armed police and have separate intelligence Branches, crime branches, etc. Police set up in big cities like Delhi, Kolkata, Mumbai, Chennai, Bangalore, Hyderabad, Ahmedabad, Nagpur, Pune, etc. is directly under a Commissioner of Police who enjoys magisterial powers. All senior police posts in various States are manned by the Indian Police Service (IPS) cadres, recruitment to which is made on all-India basis.

The Central Government maintains Central Police forces, Intelligence Bureau (IB), Central Bureau of Investigation (CBI), Institutions for training of police officers and forensic science institutions to assist the states in gathering intelligence, in maintaining law and order, in investigating special crime cases and in providing training to the senior police officers of the State governments.

INDO-TIBETAN BORDER POLICE

The Indo-Tibetan Border Police (ITBP) was raised on 21 October 1962 after the Chinese aggression as an integrated intelligence / signal / pioneer / engineering / medical and guerrilla unit and was initially placed under the Intelligence Bureau for operational control. In 1975 the primary task of the ITBP was re-defined as security of northern borders, to check illegal immigration and trans-border crimes.

ITBP is given the responsibility of providing security / communication / medical cover to the pilgrims during Kailash-Mansarover Yatra besides being the Nodal Agency Disaster Management in the Central and Western Himalayan region. The ITBP has 29 battalions including four specialist battalions.

BORDER SECURITY FORCE

Border Security Force (BSF) raised in 1965, is entrusted with the task of maintaining permanent vigilance on India's international borders. The present strength of BSF is 157 battalions and guards a total of 6,385.36 km of international borders, spread over mountains, inhospitable deserts, riverine, snow bound and marshy areas. BSF has been assigned the role of promoting a sense of security amongst the people living in the border areas and preventing trans-border crimes, such as smuggling, infiltration / exfiltration and other illegal activities.

ASSAM RIFLES

The Assam Rifles raised as Catchar Levy in 1835 is the oldest Police Force in the country. The force has 46 battalions. The force has a dual role of maintaining internal security in the North-Eastern region and guarding the Indo-Myanmar Border. The Assam Rifles contribution towards assimilation of the people of north-east into the national mainstream is truly monumental. The force is fondly called "The Sentinels of the North-East" and "Friends of the Hill People."

NATIONAL SECURITY GUARDS

The National Security Guards (NSG) modelled on the pattern of SAS of the UK and GSG-9 of Germany has been set up in 1984 for handling counter terrorists and counter hijacking operations including VIP security. It is a highly trained and motivated Force for effectively dealing with terrorist activities in the country. It also trains state police commandos to upgrade their capability to meet the terrorist threats and carry out bomb detection / defusion operations. The NSG maintains the only National Bomb Data Centre of the country. A counter terrorist operation was carried out by the commandos of NSG at Akshar Dham Temple, Ahmedabad in September 2002 and they were successful in eliminating the terrorists who took refuge in the temple complex. NSG has been presented Presidential colour on 16 October 2004.

CENTRAL RESERVE POLICE FORCE

The Central Reserve Police Force (CRPF) is an Armed Force of the Union of India for internal security management. This Force was raised in 1939 at Neemuch (MP) as the Crown Representative's Police and was renamed as the Central Reserve Police Force in 1949.

At present, CRPF has 191 Battalions including Rapid Action Force (RAF). The Force remained committed to internal security and counter insurgency-cum-anti-terrorist operations in various parts of the country. This is a Force with ladies contingents organised in two Mahila Battalions.

RAPID ACTION FORCE

Rapid Action Force (RAF) is an integral part of the Central Reserve Police Force. With 10 battalions it has been conceived in 1992 as a specially trained and equipped to be an effective strike force mainly to tackle communal riots and riot-like situations. Unlike the conventional force of law and order, the RAF in addition to its law enforcing role has got post-riot role in rescue and relief.

CENTRAL INDUSTRIAL SECURITY FORCE

The Central Industrial Security Force (CISF) was established in 1969 to provide security to industrial undertakings of the government. The Force numbering over 96057 has the responsibility to protect and safeguard the industrial undertakings owned by the Central government together with such installations as are specified as vital by the government. CISF is presently providing security cover to 267 public sector undertakings. The security of 54 Airports and the government buildings in Delhi together with such installations as specified vital has also been entrusted to the CISF. The CISF has launched security and fire protection consultancy services in 2001.

SARDAR VALLABHBHAI PATEL NATIONAL POLICE ACADEMY

The Sardar Vallabhbhai Patel National Police Academy is the premier police training

institutions in the country which imparts basic as well as in-service training to Indian Police Service (IPS) officers. Established in 1948 at Mount Abu, Rajasthan, the Academy was shifted to Hyderabad in 1975. The Academy also promotes study and research on police-related topics.

SASHASTRA SEEMA BAL

Special Service Bureau (SSB) was set up in the early 1963 under Cabinet Secretariat in the wake of India China conflict of 1962 to build peoples' morale and inculcate spirit of resistance in the border population against threats of subversion, infiltration and sabotage from across the border. It is now under the administrative control of the Ministry of Home Affairs with effect from 15 January 2001 and assigned the responsibility to guard along the Indo-Nepal and Indo-Bhutan Borders. Name of SSB has been changed as ''Sashastra Seema Bal'' from 15 December 2003. For its dedicated and distinguished service, SSB was presented President's Colours in March 2004.

CIVIL DEFENCE

Civil Defence includes any measures not amounting to actual combat, for affording protection to any person, property, place or thing in India of any part of the territory thereof against any hostile attack whether from air, land, sea or other places or for operating / mitigating the effect of any such attack; whether such measures are taken before, during or after the time of such attack. Civil Defence is to be organised as an integral part of the defence of the country. Civil Defence aims at saving life, minimise damage to the property, maintaining continuity of industrial production and keeping the public morale high in the even of a hostile attack. Central financial assistance to the States for Civil Defence measures is confined to categorised Civil Defence towns only. Civil Defence is primarily organised on voluntary basis except for a small nucleus of paid staff and establishment which is augmented during emergencies. Civil Defence activities are restricted to 225 categorised towns spread all over the country. The present target of Civil Defence volunteers is 13 lakh, of which 6.64 lakh have already been raised and 5 lakh trained.

Civil Defence volunteers are also deployed, on a voluntary basis, in various constructive and nation building activities, including providing assistance to the administration in undertaking social and welfare services and in the prevention / mitigation of natural / man-made disasters as well as in post-disaster response and relief operations. The training of Civil Defence organisation is carried out in three tier levels. The training of Trainers and specialised training is conducted at the National Civil Defence College, Nagpur and Team / Leadership training is conducted at State Civil Defence Institutes. Training of the volunteers in Civil Defence Organisation is carried out at Local / Town levels by trained trainers in the form of short-term training programmes.

The Civil Defence has reached out to over 200 schools and colleges besides residential areas in Delhi and a trained over more than 10,000 women and girl students in self-defence.

HOME GUARDS

Home Guards is a voluntary force, first raised in India in December 1946, to assist the police in controlling civil disturbance and communal riots. Subsequently, the concept of the voluntary citizens force was adopted by several States. In the wake of Chinese aggression in 1962, the Centre advised the States and Union Territories

to merge their existing voluntary organisations into one uniform voluntary force known as Home Guards. The role of Home Guards is to serve as an auxiliary to the police in maintenance of internal security, help the community in any kind of emergency such as an air-raid, fire, cyclone, earthquake, epidemic, etc., help in maintenance of essential services, promote communal harmony and assist the administration in protecting weaker sections, participate in socio-economic and welfare activities and perform Civil Defence duties. Home Guards are of two types—rural and urban. In border States, Border Wing Home Guards Battalions, have also been raised, which serve as an auxiliary to the Border Security Force. As against a targeted strength of 5,73,793, the raised strength is 4,90,842 Home Guards. The organisation is spread over in all States and Union Territories except in Kerala.

Eighteen Border Wing Home Guards (BWHG) Battalions have been raised in the border States viz. Punjab (6 Bns), Gujarat (4 Bns) and one each of Battalions for Assam, Meghalaya, Tripura and West Bengal to serve as an auxiliary to Border Security Force for preventing infiltration on the international border / coastal areas, guarding of VVIPs and lines of communication in vulnerable areas at the time of external aggression.

Home Guards are raised under the Home Guards Act and Rules of the States / Union Territories. They are recruited from various cross sections of the people such as doctors, engineers, lawyers, private sector organisations, college and University students, agricultural and industrial workers, etc., who give their spare time to the organisation for betterment of the community. All citizens of India, who are in the age group of 18-50, are eligible to become members of Home Guards. Normal tenure of membership in Home Guards is 3 to 5 years. Amenities and facilities given to Home Guards include free uniform for gallantry, distinguished and meritorious services. A Home Guard, whenever called out for duty / training, is paid duty / training allowance at prescribed rates to meet out-of-pocket expenses. Members of Home Guards with three years service in the organisation are trained in police in maintenance of law and order, prevention of crime, anti-decoity measures, border patrolling, prohibition, flood relief, fire-fighting, election duties and social welfare activities. In the event of national emergency, some portion of Civil Defence work is also entrusted to the Home Guards.

The Ministry of Home Affairs formulates the policy in respect of role, target, raising, training, equipping, establishment and other important matters of Home Guards Organisation. Expenditure on Home Guards is generally shared between Centre and State Governments as per existing financial policy on discrete financial terms.

FIRE SERVICE

Fire is a State subject and fire services are administered by the States / Union Territories. The Ministry of Home Affairs renders technical advice to States / Union Territories and Central Ministries on fire protection, fire prevention and fire legislation. For the modernisation of fire service in the states, the Ministry of Home Affairs arranges GIC loans through the Ministry of Finance. A sum of Rs 404.97 crore as GIC has been arranged for development of State Fire Services since 1980-81. In addition, Xth Finance Commission allocated Rs 80 crore as grant-in-aid for the modernisation of fire service in various States during the period 1995-2000. Eleventh Finance Commission further allocated Rs 201 crore as grant-in-aid for 2000-05. The training of the firemen is conducted in State Fire Training Centres—at present

14 in numbers. But the training of the Officers cadre is conducted at National Fire Service College, Nagpur. The National Fire Service College, Nagpur since its inception in 1956, trained 13794 fire officers including 71 foreign trainees from twelve countries.

LOK NAYAK JAYAPRAKASH NARAYAN (LNJN) NATIONAL INSTITUTE OF CRIMINOLOGY AND FORENSIC SCIENCE

A premier institution for Criminology, the National Institute of Criminology and Forensic Science (MHA) was set up in 1972. It has been named as "Lok Nayak Jayaprakash Narayan National Institute of Criminology and Forensic Science" on 3 October 2003 and continues to function as the country's nodal institution for training of functionaries of Criminal Justice System in the twin fields of Criminology and Forensic Science, as well as for research related to these fields.

Teaching Programmes/Training and Research : The Institute is affiliated with the Guru Gobind Indraprastha University, Delhi for running M.A / M.Sc programme in Criminology and Forensic Science. The courses started w.e.f. 3 August 2004. A DNA Lab with state-of-the-art equipments like Bio-robot workstation has been set up.

PERSONAL LAW

The people of India are of different religions and faiths. They are governed by different sets of personal laws in respect of matters relating to family affairs, i.e., marriage, divorce, succession, etc.

MARRIAGE

Law relating to marriage and / or divorce has been codified in different enactments applicable to people of different religions. These are :

1. The Converts' Marriage Dissolution Act, 1866;
2. The Indian Divorce Act, 1869;
3. The Indian Christian Marriage Act, 1872;
4. The Kazis Act, 1880;
5. The Anand Marriage Act, 1909;
6. The Indian Succession Act, 1925;
7. The Child Marriage Restraint Act, 1929;
8. The Parsi Marriage and Divorce Act, 1936;
9. The Dissolution of Muslim Marriage Act, 1939;
10. The Special Marriage Act, 1954;
11. The Hindu Marriage Act, 1955;
12. The Foreign Marriage Act, 1969; and
13. The Muslim Women (Protection of Rights on Divorce) Act, 1986.

The Special Marriage Act, 1954 extends to the whole of India except the State of Jammu and Kashmir, but also applies to the citizens of India domiciled in Jammu and Kashmir. Persons governed by this Act can specifically register marriage under the said Act even though they are of different religious faiths. The Act also provides that the marriage celebrated under any other form can also be registered under the Special Marriage Act, if it satisfies the requirements of the Act. The section 4(b) (iii)

of the Act was amended to omit the words "or epilepsy." Sections 36 and 38 have been amended to provide that an application for alimony *pendente lite* or the maintenance and education of minor children be disposed of within 60 days from the date of service of notice on the respondent.

An attempt has been made to codify customary law which is prevalent among Hindus by enacting the Hindu Marriage Act, 1955. The Hindu Marriage Act, 1955, which extends to the whole of India, except the State of Jammu and Kashmir, applies also to Hindus domiciled in territories to which the Act extends and those who are outside the said territories. It applies to Hindus (in any of its forms or development) and also to Buddhists, Sikhs, Jains and also those who are not Muslims, Christians, Parsis or Jews by religion. However, the Act does not apply to members of any scheduled tribes unless the Central Government by notification in the official Gazette otherwise directs.

Provisions in regard to divorce are contained in section 13 of the Hindu Marriage Act and section 27 of the Special Marriage Act. Common ground on which divorce can be sought by a husband or a wife under these Acts fall under these broad heads: Adultery, desertion, cruelty, unsoundness of mind, venereal disease, leprosy, mutual consent and being not heard of as alive for seven years.

As regards the Christian community, provisions relating to marriage and divorce are contained in the Indian Christian Marriage Act, 1872 and in section 10 of the Indian Divorce Act, 1869 respectively. Under that section the husband can seek divorce on grounds of adultery on the part of his wife and the wife can seek divorce on the ground that the husband has become convert to another religion and has gone through marriage with another woman or has been guilty of (a) incestuous adultery; (b) bigamy with adultery; (c) marriage with another woman with adultery; (d) rape, sodomy or bestiality; (e) adultery coupled with such cruelty as without adultery would have entitled her to a divorce, a *mensa etoro* (a system of divorce created by the Roman Catholic Church equivalent to judicial separation on grounds of adultery, perverse practices, cruelty, heresy and apostasy) and (f) adultery coupled with desertion without reasonable excuse for two years or more.

In the Indian Divorce Act, 1869 comprehensive Amendments were made through the Indian Divorce (Amendment) Act, 2001 (No. 51 of 2001) to remove discriminatory provisions against women in the matter of Divorce. Further, sections 36 and 41 of the Act were amended by the Marriage Laws (Amendment) Act, 2001 to provide that an application for alimony *pendente lite* or the maintenance and education of minor children be disposed of within 60 days from the date of service of notice on the respondent.

As regards Muslims, marriages are governed by the Mohammedan Law prevalent in the country. As regards divorce, i.e., *Talaq*, a Muslim wife has a much restricted right to dissolve her marriage. Unwritten and traditional law tried to ameliorate her position by permitting her to see dissolution under the following forms : (a) *Talaq-I-Tafwid*: This is a form of delegated divorce. According to this, the husband delegates his right to divorce in a marriage contract which may stipulate, *inter alia*, on his taking another wife, the first wife has a right to divorce him; (b) *Khula* : this is a dissolution of agreement between the parties to marriage on the wife's giving some consideration to the husband for her release from marriage ties. Terms are a matter of bargain and usually take the form of the wife giving up her *mehr* or a portion of it, and (c) *Mubarat* : this is divorce by mutual consent.

Further, by the Dissolution of Muslim Marriage Act, 1939, a Muslim wife has been given the right to seek dissolution of her marriage on these grounds; (i) whereabouts of the husband have not been known for a period of four years; (ii) husband is not maintaining her for a period of two years; (iii) imprisonment of husband for a period of seven years or more; (iv) failure on the part of husband to perform his marital obligations, without a reasonable cause, for a period of three years; (v) impotency of husband; (vi) two-year long insanity; (vii) suffering from leprosy or virulent venereal disease' (viii) marriage took place before she attained the age of 15 years and not consummated; and (x) cruelty.

The Parsi Marriage and Divorce Act, 1936 governs the matrimonial relations of Parsis. The word 'Parsi' is defined in the Act as a Parsi Zoroastrian. A Zoroastrian is a person who professes the Zoroastrian religion. It has a racial significance. Every marriage as well as divorce under this Act is required to be registered in accordance with the procedure prescribed in the Act. However, failure to fulfil requirements on that behalf does not make marriage invalid. The Act provides only for monogamy. By the Parsi Marriage and Divorce (Amendment) Act, 1988, scope of certain provisions of the Parsi Marriage and Divorce Act, 1936 have been enlarged so as to bring them in line with the Hindu Marriage Act, 1955. Recently, sections 39 and 49 of the Parsi Marriage and Divorce Act, 1936 were amended by the Marriage Laws (Amendment) Act, 2001 to provide that an application for alimony pendent lite or the maintenance and education of minor children be disposed of within 60 days from the date of service of notice on the wife or the husband as the case may be.

As for the matrimonial laws of Jews, there is no codified law in India. Even today, they are governed by their religious laws. Jews do not regard marriage as a civil contract, but as a relation between two persons involving very sacred duties. Marriage can be dissolved through courts on grounds of adultery or cruelty. Marriages are monogamous.

CHILD MARRIAGE

The Child Marriage Restraint Act, 1929, from 1 October 1978, provides that marriage age for males will be 21 years and for females 18 years.

ADOPTION

Although there is no general law of adoption, it is permitted by the Hindu Adoption and Maintenance Act, 1956 amongst Hindus and by custom amongst a few numerically insignificant categories of persons. Since adoption is legal affiliation of a child, it forms the subject matter of personal law. Muslims, Christians and Parsis have no adoption laws and have to approach the court under the Guardians and Wards Act, 1890. Muslims, Christians and Parsis can take a child under the said Act only under foster care. Once a child under foster care becomes major, he is free to break away all this connections. Besides, such a child does not have the legal right of inheritance. Foreigners, who want to adopt Indian children have to approach the court under the aforesaid Act.

Hindu law relating to adoption has been amended and codified into the Hindu Adoptions and Maintenance Act, 1956, under which a male or female Hindu having legal capacity, can take a son or daughter in adoption. In dealing with the question of guardianship of a minor child, as in other spheres of family law, there is no uniform law. Hindu law, Muslim Law and the Guardians and Wards Act, 1890 are three distinct legal systems which are prevalent. A guardian may be a natural guardian,

testamentary guardian or a guardian appointed by the court. In deciding the question of guardianship two distinct things have to be taken into account—person of the minor and his property. Often the same person is not entrusted with both.

The Hindu Minority and Guardianship Act, 1956 has codified laws of Hindus relating to minority and guardianship. As in the case of uncodified law, it has upheld the superior right of father. It lays down that a child is a minor till the age of 18 years. Natural guardian for both boys and unmarried girls is first the father and then the mother. Prior right of mother is recognised only for the custody of children below five. In case of illegitimate children, the mother has a better claim than the putative father. The act makes no distinction between the person of the minor and his property and therefore guardianship implies control over both.

Under the Muslim Law, the father enjoys a dominant position. It also makes a distinction between guardianship and custody. For guardianship, which has usually reference to guardianship of property, according to Sunnis, the father is preferred and in his absence his executor. If not executor has been appointed by the father, the guardianship passes on to the paternal grandfather to take over responsibility and not that of the executor. Both schools, however, agree that father while alive is the sole guardian. Mother is not recognised as a natural guardian even after the death of the father.

As regards rights of a natural guardian, there is no doubt that father's right extends both to property and person. Even when mother has the custody of minor child. Father's general right of supervision and control remains. Father can, however, appoint mother as a testamentary guardian. Thus, though mother may not be recognised as natural guardian, there is no objection to her being appointed under the father's will.

Muslim law recognises that mother's right to custody of minor children (Hizanat) is an absolute right. Even the father cannot deprive her of it. Misconduct is the only condition which can deprive the mother of this right. As regards the age at which the right of mother to custody terminates, the Shia school holds that mother's right to the Hizanat is only during the period of rearing which ends when the child completes the age of two, whereas Hanafi school extends the period till the minor son has reached the age of seven. In case of girls, Shia law upholds mother's right till the girl reaches the age of seven and Hanafi school till she attains puberty.

The general law relating to guardians and wards is contained in the Guardians and Wards Act, 1890. It clearly lays down that father's right is primary and no other person can be appointed unless the father is found unfit. This Act also provides that the court must take into consideration the welfare of the child while appointing a guardian under the Act.

MAINTENANCE

Obligation of a husband to maintain his wife arises out of the status of the marriage. Right to maintenance forms a part of the personal law.

Under the Code of Criminal Procedure, 1973, (2 of 1974), right of maintenance extends not only to the wife and dependent children, but also to indigent parents and divorced wives. Claims of the wife, etc., however, depends on the husband having sufficient means. Claim of maintenance for all dependent persons was limited to Rs 500 per month. But, this limit was removed by the Code of Criminal Procedure (Amendment) Act, 2001 (No. 50 of 2001). Inclusion of the right of maintenance under

the Code of Criminal Procedure has the advantage of making the remedy both speedy and cheap. However, divorced wives who have received money payable under the customary personal law are not entitled to claim maintenance under the Code of Criminal Procedure.

Under Hindu Law, the wife has an absolute right to claim maintenance from her husband. But she loses her right if she deviates from the path of chastity. Her right to maintenance is codified in the Hindu Adoptions and Maintenance Act, 1956. In assessing the amount of maintenance, the court takes into account various factors like position and liabilities of the husband. It also judges whether the wife is justified in living apart from husband. Justifiable reasons are spelt out in the Act. Maintenance *pendente lite* (pending the suit) and even expenses of a matrimonial suit will be borne by either, husband or wife, if the other spouse has no independent income for his or her support. The same principle will govern payment of permanent maintenance.

Under the Muslim Law, the Muslim Women (Protection of Rights on Divorce) Act, 1986 protects rights of Muslim women who have been divorced by or have obtained divorce from their husbands and provides for matters connected therewith or incidental thereto. This Act, *inter alia*, provides that a divorced Muslim woman shall be entitled to (a) reasonable and fair provision and maintenance to be made and paid to her within the *iddat* period by her former husband; (b) where she herself maintains children born to her before or after her divorce, a reasonable and fair provision and maintenance to be made and paid by her former husband for a period of two years from the respective dates of birth of such children; (c) an amount equal to the sum of *mehr* or dower agreed to be paid to her at the time of her marriage or at any time thereafter according to the Muslim Law; and (d) all property given to her before or at the time of marriage or after her marriage by her relatives or friends or by husband or any relatives of the husband or his friends.

In addition, the Act also provides that where a divorced Muslim woman is unable to maintain herself after the period of *iddat*, the magistrate shall order directing such of her relatives as would be entitled to inherit her property on her death according to the Muslim Law, and to pay such reasonable and fair maintenance to her as he may determine fit and proper, having regard to the needs of the divorced woman, standard of life enjoyed by her during her marriage and means of such relatives, and such maintenance shall be payable by such relatives in proportion to the size of their inheritance of her property and at such periods as he may specify in his order.

Where such divorced woman has children, the magistrate shall order only such children to pay maintenance to her, and in the event of any such children being unable to pay such maintenance, the magistrate shall order parents of such divorced woman to pay maintenance to her.

In the absence of such relatives or where such relatives are not in a position to maintain her, the magistrate may direct State Wakf Board established under Section 13 of the Wakf Act, 1995 functioning in the area in which the woman resides, to pay such maintenance as determined by him.

The Parsi Marriage and Divorce Act, 1936 recognises the right of wife to maintenance—both alimony *pendente lite* and permanent alimony. The maximum amount that can be decreed by the court as alimony during the time a matrimonial suit is pending in court, is one-fifth of the husband's net income. In fixing the

quantum as permanent maintenance, the court will determine what is just, bearing in mind the ability of husband to pay, wife's own assets and conduct of the parties. The order will remain in force as long as wife remains chaste and unmarried.

The Indian Divorce Act, 1869 inter alia governs maintenance rights of a Christian wife. The provisions are the same as those under the Parsi Law and the same considerations are applied in granting maintenance, both alimony pendente lite and permanent maintenance.

SUCCESSION

The Indian Succession Act was enacted in 1925. The object of the Act was to consolidate the large number of laws which were in existence at that time. Laws governing succession to Muslims and Hindus were excluded from the purview of the Act. While consolidating the law in respect of succession, two schemes, one relating to succession to property of persons like Indian Christians, Jews and persons married under the Special Marriage Act, 1954 and the other relating to succession rights or Parsis, were adopted.

In the first scheme, applying to those other than Parsis, in the case of a person dying intestate leaving behind a widow and lineal descendants, the widow would be entitled to a fixed share of one-third of property and lineal descendants shall be entitled to the remaining two-third. This law was amended subsequently with the object of improving rights of widows and it was provided that where the intestate dies leaving behind his widows and it was provided that where the intestate dies leaving behind his widow and no lineal descendant and the net value of the estate does not exceed Rs 5,000, the widow would be entitled to the whole of this property. Where the net value of the estate exceeds Rs 5,000 she is entitled to charge a sum of Rs 5,000 with interest at four per cent payment and in the residue, she is entitled to her share. The Act imposes no restriction on the power of a person to will away his property.

Under the second scheme, the Act provides for Parsi intestate succession. By the Indian Succession (Amendment) Act, 1991 (51 of 1991), the Act was amended to provide equal shares for both sons and daughters in their parental properties, irrespective of the fact that it was that of the father or that of the mother. It also enables the Parsis to bequeath their property to religious or charitable purposes, etc., without any restrictions. In effect the amended law provides that where a Parsi dies intestate leaving behind a widow or widower as the case may be, and children, the property shall be divided so that the widow or widower and each child receives equal share. Further, where a Parsi dies leaving behind one or both parents in addition to children, or widow widower and children, the property shall be so divided that the parent or each of the parents shall receive a share equal to half the share of each child.

This Act was amended by the Indian Succession (Amendment) Act, 2002. It was felt that section 32 of the principal Act is discriminatory to widows and as such the proviso to section 32 was omitted to remove discrimination in this regard. Section 213 was also amended by this amending Act to make Christians at par with other communities.

The law relating to intestate succession among Hindus is codified in the Hindu Succession Act, 1956 (30 of 1956). It extends to the whole of India except the State of Jammu and Kashmir. The remarkable features of the Act are the recognition of the

right of women to inherit property of an intestate equally with men and abolition of the life estate of female heirs.

A vast majority of Muslims in India follow Hanafi doctrines of Sunni law. Courts presume that Muslims are governed by Hanafi law unless it is established to be the contrary. Though there are many features in common between Shia and Sunni schools, yet there are differences in some respects. Sunni law regards Koranic verses of inheritance as an addendum to pre-Islamic customary law and preserves the superior position of male agnates. Unlike Hindu and Christian laws, Muslim law restricts a person's right of testation. A Muslim can bequeath only one-third of his estate. A bequest to a stranger is valid without the consent of heirs if it does not exceed a third of the estate, but a bequest to an heir without the consent of other heirs is invalid. Consent of heirs to a bequest must be secured after the succession has opened and any consent given to a bequest during the lifetime of the testator can be retracted after his death. Shia law allows Muslims the freedom of bequest within the disposable third.

20 Labour

LABOUR policy in India has evolved in response to specific needs of the situation to suit requirements of planned economic development and social justice and has a two-fold objective, viz., maintaining industrial peace and promoting the welfare of labour.

LABOUR REFORMS

Labour Reforms essentially means taking steps to increase production, productivity and employment opportunities in the economy while protecting overall interest of labour. Essentially it means skill development, retraining, redeployment, updating knowledge base of workers-teachers, promotion of leadership qualities etc. Labour Reforms also includes labour law reforms. Changes in the labour laws are also done protecting the interests of workers. Brief notes on different labour laws are given in subsequent paragraphs.

THE MINIMUM WAGES ACT, 1948

The Minimum Wages Act, 1948 provides for fixation, review, revision and enforcement of minimum wage, both by the Central Government and the State Government, in respect of scheduled employments in their respective jurisdictions. There are 46 scheduled employments in the Central sphere whereas the number of these employments in the State sphere is 1542.

To protect the wages against inflation, the Central Government has introduced a component of Variable Dearness Allowance (VDA), which is linked to Consumer Price Index. The VDA is revised every six months effective 1st April and 1st October every year. So far, 26 States / UTs have also adopted the VDA as a component of minimum wage.

In the absence of a uniform national minimum wage, the concept of a national floor level minimum wage was mooted by the Central Government in 1996, based on the recommendations of the National Commission on Rural Labour in 1991, and fixed, initially, at Rs. 35 per day, based on the subsequent increase in the price level. Since the adoption of national minimum wage is a non- statutory measure, all State Governments / Union Territories are requested to ensure that in none of the scheduled employments the rate of minimum wages fixed / revised are lower than the national minimum wage of Rs. 66 per day revised with effect from 1st February, 2004.

THE PAYMENT OF WAGES ACT, 1936

The Payment of Wages Act, 1936 was enacted to regulate payment of wages to workers employed in industries and to ensure a speedy and effective remedy to them against illegal deductions and / or unjustified delay caused in paying wages to them. The wage ceiling under Payment of Wages Act, 1936, was fixed at Rs. 1600 / - pm in 1982. With a view to enhance the wage ceiling to Rs. 6500 / - p.m. for applicability of the Act, to empower the Central Government to further increase the ceiling in future by way of notification and to enhance the penal provisions etc., the Payment of Wages (Amendment) Act, 2005, which was passed by both Houses of Parliament, has been notified on 6.9.2005 as an Act 41 of 2005 by the Ministry of Law & Justice. Subsequently, the Ministry of Labour & Employment has issued the Notification S.O. 1577(E) to

make the Payment of Wages (Amendment) Act, 2005 effective from the 9th November 2005.

THE PAYMENT OF BONUS ACT, 1965

The Payment of Bonus Act, 1965 provides for payment of bonus to employees as defined under the Act. According to the Act, "employees" means any person (other than an apprentice) employed on a salary or wage not exceeding Rs. 3,500/- per month in any industry to do any skilled or unskilled, manual, supervisory, managerial, administrative, technical or clerical work for hire or reward. However, according to Section 12 of the Act, the bonus is payable to employees whose salary or wage exceed Rs. 2,500/- per month, has to be calculated as if his salary or wage were Rs. 2,500/- per month. The above wage ceilings were last revised on 9th July, 1995 and made effective from 1st April, 1993.

The second National Commission on Labour (NCL) has recommended that the present system of two wage ceiling for reckoning entitlement and for calculation of bonus should be suitably enhanced to Rs. 7,500/- per month and Rs. 3,500/- per month respectively. Considering the recommendation made by Second National Commission on Labour in respect of eligibility/calculation ceiling and further developments, the amendments to Payment of Bonus Act, 1965 were again discussed in 41st Session of Indian Labour Conference (ILC) held on 27-28th April, 2007 at New Delhi. It was unanimously resolved for revision in calculation ceiling from Rs.2,500/- to Rs.3,500/- per month. As regards the eligibility limit, the Central Trade Union Leaders as well as the representatives of the Central and State Governments have agreed for enhancing the eligibility limit from Rs.3,500/- to Rs.10,000/- per month keeping in view the erosion in money value since June, 2002, when the eligibility limit was recommended by National Commission on Labour to be at Rs.7,500/. The Employers' representatives emphasized for increasing the eligibility limit to Rs.7,500/- per month only in the first instance as recommended by Second National Commission on Labour. However, the Employers' Organisation agreed that further increase in eligibility limit to a suitable level or to Rs.10,000/- may be decided by the Chairman, 41st Session of ILC i.e. Minister of State (Independent Charge), Labour & Employment.

Further, it was also agreed unanimously in 41st Session of Indian Labour Conference that the employees employed through contractors on building operations should also be made eligible for bonus under the Payment of Bonus Act, 1965.

In view of the recommendation of the National Commission on Labour and further consultations, a proposal to amend sections 2 (13) and 12 of the Payment of Bonus Act 1965, so as to enhance the eligibility limit from Rs.3,500/- to Rs.10,000/- per month and calculation ceiling from Rs.2500/- to Rs.3500/- per month and to make employees employed through contractors on building operations eligible for payment of bonus by deleting section 32(vi) of the Act is under active consideration of the Government.

WAGE BOARDS

In the 1950s and 60s, when the organised labour sector was at a nascent stage of its development without adequate unionization or with trade unions without adequate bargaining power, Government in appreciation of the problems which arise in the arena of wage fixation, constituted various Wage Boards. The Wage Boards are tripartite in character in which representatives of workers, employers and independent members participate and finalize the recommendations. The utility and contribution

of such boards in the present context are not beyond question. Except for the Wage Boards for Journalists and Non-Journalists newspaper and news-agency employees, which are statutory Wage Boards, all other Wage Boards are non-statutory in nature.

The Second National Commission on Labour (NCL) has recommended that 'there is no need for any wage board, statutory or otherwise, for fixing wage rates for workers in any industry'. However, Government decided not to accept the recommendations regarding the statutory wage boards i.e. Wage Boards for Working Journalists and Non-Journalists Newspaper Employees under the Working Journalists and Non-Journalists Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1965.

WAGE BOARDS FOR NEWSPAPER EMPLOYEES

The Working Journalists and other Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955 regulates conditions of service of working journalists and other persons employed in newspaper establishments. The Act provides for setting up of Wage Boards for fixation and revision of rates of wages in respect of working journalists and non-journalists newspaper / news agency employees. The Wage Boards for such employees were set up in the years 1956, 1963, 1975, 1985 and 1994. The last Wage Boards i.e. Manisana Wage Boards was constituted in the year 1994 and submitted its report to the Government on 25th July, 2000.

The Government after examining the recommendations of the boards decided to accept them with some minor modifications. The Government have impressed upon all State Government / Union territories to take effective measures for implementing the recommendations of the Wage Boards. They have been advised to set up Tripartite Committees / Implementation Cells for speedy and effective implementation and to furnish the progress reports on quarterly basis.

So far 24 State Governments / Union territories viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, J&K, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, Uttaranchal, West Bengal, Chandigarh, Delhi, Puducherry have constituted State Level Monitoring Committee for implementation of the Awards.

A Central Level Monitoring Committee has also been constituted under the Chairmanship of Labour & Employment Adviser, Ministry of Labour and Employment for reviewing the implementation of the Awards. The Committee has visited various states for this purpose.

The Government has, now constituted two new Wage Boards one for Working Journalists and other for Non-Journalists Newspaper Employees under Sections 9 and 13 C respectively of the Working Journalists and Non-Journalists Newspaper Employees(Conditions of Service) and Miscellaneous Provisions Act, 1965 vide notification in the Gazette of India (Extra Ordinary) S.O. Nos. 809 (E) and 810 (E) dated 24.05.2007. The wage boards will submit its report within a period of three years to the Union Government. These Wage Boards will be headed by Dr. Justice K. Narayana Kurup, as a common Chairman who is a former, Judge, High Court of Kerala and acting Chief Justice of High Court of Madras. In addition, it has also been decided to have common full time Member Secretary besides two common independent members and three persons representing employers in relation to Newspaper establishments, three persons representing working journalists for Wage Board under

Section 9 and three persons representing non-journalist Newspaper Employees under Section 13 C of the Act. The Headquarter of the Boards shall be at New Delhi.

CONTRACT LABOUR

The system of employing contract labour is prevalent in most industries for different jobs including skilled and semi-skilled. It is also prevalent in agricultural and allied operations, and to some extent, in the services sector. A contract labour is a person who is hired, supervised, contracted and remunerated by a contractor, who, in turn, is compensated by the user enterprises. The concern to improve the working and living conditions of contract labour, and the Supreme Court of India's observations in the case of Standard Vacuum Refinery Company Vs. their Workmen resulted in the enactment of the Contract Labour (Regulation and Abolition) Act, 1970.

The Act seeks to regulate the employment of contract labour in certain establishments and to provide for its abolition in certain circumstances and for matters connected therewith. The Act and the Contract Labour (Regulation and Abolition) Central Rules, 1971 came into force on 10 February 1971. The Act provides for the constitution of Central and State Advisory Contract Labour Boards to advise the respective Governments on matters arising out of the administration of the Act. The Act contains specific provisions to ensure payment of wages and certain amenities to be provided by the contractor to the contract labour.

The Central and State Governments are empowered to prohibit employment of contract labour in any activity in an establishment and also to grant exemption to establishments / contractors in the case of an emergency, from the applicability of the provisions of the Act. The Central Government has issued a number of notifications prohibiting employment of contract labour in different categories of works in different fields.

In the Central sphere, the Central Industrial Relations Machinery (CRIM) has been entrusted with the responsibility of enforcing the provisions of the Act and rules made thereunder. In a landmark judgement relating to contract labour, a five judge Constitution Bench of Supreme Court in the case of Steel Authority of India Ltd. Vs. National Union of Waterfront Workers & Others have held that the provisions of the Act do not, expressly or by necessary implication, provide for automatic absorption of contract labour. Consequently, the Principal Employer cannot be required to order absorption of the contract labour working in the concerned establishment.

CHILD LABOUR

ELIMINATION OF CHILD LABOUR

Elimination of child labour is an area of great concern and of commitment for the Government of India. Articles 24 and 39 of the constitution provides for protection of the children from involvement in economic activities and from avocations unsuited to their age. After the recent Constitutional Amendment, Right to Education for children up to 14 years is now a Fundamental Right (Article 21 A). Considering the magnitude and the nature of the problem, a gradual and sequential approach has been adopted to withdraw and rehabilitate children beginning with those working in hazardous occupations and processes.

Consistent with the constitutional provisions, the Child Labour (Prohibition and Regulation) Act, 1986 was enacted replacing the Employment of Children Act, 1938. The Act seeks to prohibit employment of children below 14 years in hazardous

occupations and processes and also regulates the working conditions of children in other employments. In the last 5 years, the number of hazardous 'occupations' listed in the Schedule of the Act has increased from 7 to 13 and 'processes' from 18 to 57 on the recommendations of the Technical Advisory Committee.

A National Policy on Child Labour was announced in August, 1987. The Action Plan under this policy is multi pronged. It mainly consists of: legal action, focuses on general development programmes for the benefit of the families of children; and project based action in areas of high concentration of child labour.

The National Child Labour Project Scheme (NCLP) is a Central sector scheme. Under the scheme, project societies are set up at the district level under the chairpersonship of the Collector / District Magistrate for overseeing the implementation of the project. Funds are directly allocated to the project societies formed in the districts and therefore, setting up of project societies is a pre-requisite for operationalisation of the scheme. Stipend @ Rs.100 per month per child and mid-day meals @ Rs.5 per child per day are also being provided. Besides, vocational training and health checks are essential components of the scheme. The NCLP Scheme has been revised in the 10th Plan. The revised scheme places emphasis on convergence with other related programmes of the Departments in the Government of India. In the 10th Plan, while special schools run by NCLP project society will mainstream working children in the age groups 9-14 years to the formal education system, working children in the age group 5-8 years will be mainstreamed directly through the Sarva Shiksha Abhiyan of the Department of Elementary Education and Literacy, Ministry of HRD. Efforts are being made to converge with the on-going schemes of other Departments / Ministries such as Health, Rural Development and Social Welfare at the State, District, Mandal and micro level for the attainment of the objective. Besides this, the revised scheme has also strengthened other components such as health check ups, nutrition needs and vocational training. Approximately 3.38 lakh children have already been mainstreamed into the formal education system.

The Government of India and the US Department of Labour have also initiated a US$ 40 million joint project aimed at eliminating child labour in 10 hazardous sectors across 21 districts in five States namely, Maharashtra, Madhya Pradesh, Tamil Nadu, Uttar Pradesh and NCT of Delhi. This project, popularly known as INDUS Project, is being implemented in coordination with ILO. An estimated 80,000 children will be withdrawn and rehabilitated through this project. Support activities will also be directed to 10,000 families of former child workers.

Under the Grants-in-aid Scheme, the Ministry of Labour also provides assistance to 88 Voluntary Organisations / NGOs directly to implement projects aimed at providing working children with education and vocational training opportunities in districts which are not covered under any of the aforementioned schemes.

Government has prohibited employment of children as domestic servants and in tea-shops and dhabas, etc. A Notification to this effect has been issued recently under the Child Labour (Prohibition & Regulation) Act, 1986 with effect from 10th of October, 2006. Going by this notice, employment of children as domestic workers or servants or in dhabas, restaurants, hotels, motels, tea-shops, resorts, spas or in other recreational centres is prohibited. The decision has been taken on the recommendation of the Technical Advisory Committee on Child Labour, which considered these occupations a hazardous for children and recommended their inclusion in the list of

occupations, which are prohibited for persons below 14 years under the Child Labour (Prohibition & Regulations) Act, 1986.

WOMEN LABOUR

Women constitute a significant part of the work force of India but they lag behind men in terms of level and quality of employment. The Census of India (2001) has registered 25.60 per cent of female population as workers numbering 127.22 million in absolute terms out of a total female population of 496 million. The majority of women workers are employed in the rural areas. Amongst rural women workers, 87 per cent are employed in agriculture as labourers and cultivators. Amongst the women workers in the urban areas, 80 per cent are employed in unorganized sectors like household industries, petty trades and services building and construction, etc. The employment of women in the organized sector (both public and private sectors) as on 31.03.2002, was about 4.935 million. This constitutes of 17.8 per cent of the total organised sector employment in the country. The distribution of women employees in major industries reveals that community, social and personal services sectors continued to absorb the majority of women employees. The lowest employment of women was noticed in electricity, gas and water sectors. In factory and plantation establishments women workers constituted, 10%, and 5% respectively of the total workers in 2000. In mine establishment, women workers constitute 5% of the total work workers in 2000. The main focus of the policies of the Government with regard to women labour has been to remove the handicaps under which they work, to strengthen their bargaining capacity, to improve their wages and working conditions, to enhance their skills and to open up better employment opportunities for them.

A separate cell, namely, Women Labour Cell is functioning in the Ministry of Labour and Employment to address these problems. The Maternity Benefit Act, 1961, and the Equal Remuneration Act, 1976, are the two protective and anti-exploitative legislations, which have been enacted to protect and safeguard the interest of women workers at the workplaces. The Equal Remuneration Act, 1976 stipulates payment of equal remuneration to men and women workers for same and similar nature of work. The Act also prohibits any gender discrimination in recruitment and service conditions. Under the Act, a Committee has been set up at the Centre, to advise the Government on providing increasing employment opportunities for women and generally reviewing the steps taken for effective implementation of the Act. The State Governments and Union Territory Administrations have also set up similar Committees. The Central Advisory Committee at the National level and the Advisory Committees at the State level along with competent authorities; oversee the process of implementation of the Equal Remuneration Act, 1976.

Further, the Women Cell in the Ministry is also administering a Grant-in-Aid Scheme for the welfare of women labour. This Scheme is implemented through voluntary organizations that are provided grants-in-aid for running projects for awareness generation among women workers with a view to educate them about their rights, women related schemes and programmes, etc. being implemented by Central / State Government. With a view to having a more focused approach on the subject in the 10th Plan, an enhanced outlay of Rs.225 lakh has been earmarked for the Scheme.

The Supreme Court of India in its landmark judgement dated 13.08.1997, in the matter of Visakha and others Versus the State of Rajasthan and others, laid down detailed guidelines / norms for prevention of sexual harassment of women workers

at work-places. These guidelines have the force of law under Article 141 of the Constitution.

The Government has taken up a number of initiatives to give effect to the guidelines laid down by the Supreme Court. These include circulation of the guidelines for action as indicated therein to all Secretaries to the Government of India / Chief Secretaries of the State Governments / Union Territories, Heads of Central Public Sector Undertakings and employees / employers organisations. Conduct Rules application to Government employees and officers of All India Services have been amended to incorporate the Supreme Court guidelines. To make the guidelines applicable to employees in the private sector, the Industrial Employment (Standing Orders) Act, 1946 has also been amended suitably.

BONDED LABOUR

The system of debt bondage in India an outcome of certain categories of indebtedness, which have been prevailing for a long time involving certain economically exploited, helpless and weaker sections of society. The system originated from the uneven social structure characterized by feudal and semi-feudal conditions.

The issue of 'bonded labour' came to forefront in national politics, when it was included in the old 20-Point Programmed in 1975.To implement this, Bonded Labour System (Abolition) Ordinance was promulgated. This was later replaced by the Bonded Labour System (Abolition) Act, 1976. It freed unilaterally all the bonded labourers from bondage with simultaneous liquidation of their debts.

The district and sub-divisional magistrates have been entrusted with certain duties / responsibilities towards implementation of statutory provisions. The Act also provides for constitution of Vigilance Committees at the district and sub-divisional level for implementation of the provisions of the law. The Act provides for imprisonment up to three years and find up to Rs.2, 000 whoever compels any person to render any bonded labour and whoever advances any bonded debt. Under the Bonded Labour System (Abolition) Act, 1976 identification and release of bonded labourers and rehabilitation of freed bonded labourers is the direct responsibility with the State Government concerned.

The issue of bonded labour has been discussed in the Supreme Court / High Court in the form of Public Interest Litigations. The Supreme Court has directed that the National Human Rights Commission (NHRC) should be involved in dealing with the issue of bonded labour.

The Centrally Sponsored Scheme was modified in May 2000. In the modified scheme, besides increasing the rehabilitation assistance from 10,000 / -to Rs.20.000 / - per bonded labour, provision has also been made for giving Central grants to the States / U.Ts. for awareness generation, survey of bonded labour and evaluatory studies. As per the modified scheme, Rs.10.00 lakhs are provided per annum to State Government for creating awareness generation, Rs.2.00 lakh per district to survey of bonded labourers once in 3 years in a district and Rs.5.00 lakhs per annum for conducting evaluatory studies. So far 2, 66,877 identified bonded labourers have been rehabilitated with the Central assistance of Rs.6881.26 lakhs.

UNORGANISED SECTOR

The term 'unorganised labour' has been defined as those workers who have not been able to organize themselves to pursue their common interests due to certain constraints

like casual nature of employment, ignorance and illiteracy, small and scattered size of establishments, etc.

As per the survey carried out by the National Sample Survey Organisation in the year 2004-2005, the total employment, in both organised and unorganised sectors in the country was of the order of 45.9 crore, i.e., around 2.6 crore in the organised sector and the balance 43.3 crore workers in the unorganised sector. Out of 43.3 crore workers in the unorganised sector, there are 26.8 crore workers employed in agricultural sector, about 2.6 crore in construction work and remaining in manufacturing and service.

In order to take care of the social security and welfare of unorganised workers, two-pronged strategy, i.e., legislative measures, and, implementation of welfare schemes and programmes have been followed so far. The legislative measures include the Minimum Wages Act, 1948, the Workmen's Compensation Act, 1923, the Maternity Benefit Act, 1961, the Bonded Labour System (Abolition) Act, 1976, the Contract Labour (Regulation & Abolition) Act, 1970, the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, the Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996, etc.

The Government has set up Welfare Funds for providing welfare measures to the beedi, non-coal mine and cine workers. The Funds are used to provide financial assistance to these workers for education of their children, recreation, medical and health facilities, construction of houses, etc. The Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 also has provision for setting up of welfare Board / Fund by every State Government to provide welfare / social security measures to the construction workers. Some States, like Kerala, have constituted welfare funds for specific categories of workers in the unorganised sector.

The Government had constituted a National Commission on Enterprises in the Unorganised / Informal Sector under the chairmanship of Dr. Arjun Sengupta to look into the problems of the enterprises in the unorganised sector. The terms of reference, inter-alia, include review of social security systems available for the unorganised sector workers. The Commission has presented its report on Social Security of Unorganized Sector Workers to the Government in May, 2006 with a view to providing social Security to unorganized sector workers.

A proposal to enact a central legislation is under consideration of the Government. The bill is likely to be introduced in Parliament shortly. The bill seeks to provide for health insurance , life and accidental insurance , maternity benefit, old age pension and any other benefits that may be decided by the Central Government.

LABOUR STATISTICS

The Labour Bureau,, Chandigarh / Shimla is engaged in collection, compilation, analaysis and dissemination of labour statistics at All –India level on different facets of labour, such as, employment, wages and earnings, strikes and lockouts, absenteeism, labour turnover, labour cost, working and living conditions of workers, etc., both in organized and unorganized sector of industries. It also constructs, maintains and publishes Consumer Price Index Numbers for: (i) Industrial Workers (Base 2001=100), (ii) Rural Labourers (Base 1986-87=100) and (iii) Agricultural Labourers (Base 1986-87=100). Labour Bureau also compiles Retail Price Indices of 31 essential commodities for both rural and urban centres and Wage Rate Indices for 21 industries. It imparts

training to price collectors, entrepreneurs or their representatives filing statutory returns under various Labour Act. IES / ISS probationers and international students under ISEC programme.The Labour Bureau, with the approval of the Government, has released on 09.03.2006 the new Series of CPI-IW with effect from January, 2006. The new Series is an improvement over the old Series (1982=100) as more centres, markets and consumption items are covered. An Index Review Committee under the Chairmanship of Prof. G.K. Chaddha has also been constituted to review the various aspects of the CPI –IW .

The serial statistics on labour, reports and reviews are loaded on the web-site of Labour Bureau, www.labourbureau.nic.in which is maintained and updated regularly by the Computer Unit of the Labour Bureau.

LABOUR RESEARCH

V.V. Giri National Labour Institute, NOIDA (Uttar Pradesh) is an autonomous body engaged in research pertaining to labour and training of labour administrators, trade unions, public sector managers and other government functionaries concerned with labour. Seminars, Workshops and Lectures are organized on specific issues from time to time.

Research occupies a primary place in the activities of the institute. It comprises a broad spectrurn of labour related issues and problems, in both the organized and unorganised sectors. Issues of topical concern and relevance of policy are taken up for research. The Institute continues to place greater emphasis on the disadvantaged groups, such as, child labour, women labour and rural labour.

Research activities also explore the basic needs of different groups of trainees, such as, trade union leaders and organizers in both organized and unorganised sectors, managers of public and private sectors, labour administrators and volunteers of non-governmental organisastions. There are seven Centres which carry out studies on the major themes related to research. Each Centre is guided by a Research Advisory Group, which consists of experts in the respective areas.

The Institute undertakes research projects in the areas of labour market, employment and regulations; agrarian relations and rural labour, integrated labour history, child labour and prevention of HIV / AIDS in the workplace. N.R. De Research Centre on Labour Information (NRDRCLI) at the institute is one of the most reputed library-cum-documentation centres in the area of labour studies in the country. Integrated Labour History Research Programme (ILHRP) has been started in the Institute with an aim to initiate, integrate and revive research on labour history.

The Union Minister of Labour and Employment is the President of the General Council comprising of representatives from Central Government, organization of employers and workers and Members of parliament and distinguished persons who have made noteworthy contributions in the field of labour. The Council elects the Executive Council, which is responsible for the management of the affairs of the Institute.

For the future, the V.V.Giri National Labour Institute (NLI) proposes to take up various initiatives for performance improvement in keeping with its immense potential. The Institute is geared to becoming responsive and alert in drawing upon contemporary knowledge and deploying the latest management tools. The target is towards wide dissemination of Research findings of the Institute. The purpose is to extend the reach of NLI's Research to international and national journals for

publication / articles, policy implementation at grass roots levels and to widen the outreach of NLI's training programmes and its digital archives.

WORKERS' EDUCATION

The Central Board for Workers Education (CBWE) was established in 1958 by the Ministry of Labour & Employment, Government of India to implement thee workers' education scheme at national, regional and unit / village levels for the workers from organized, unorganized and rural sectors. Supervisory and managerial cadres are also covered though joint educational programmes. The Board's training programmes aim at creating awareness and education among the workforce for their effective participation in the socio-economic development of the country.

The Board has its headquarters at Nagpur, with a network of 50 Regional and 9 Sub-Regional Directorates spread throughout the country. The five Zonal Directorates at Delhi, Guwati, Kolkata, Chennai and Mumbai monitor the activities of the "Regional 'Directorates within their respective Zone. The Board had set up its Indian Institute of Workers Education, an apex training institute at Mumbai to conduct national level training programmes for the activists of Central Trade Union Organisations / Federations besides in-house training programmes for the Board's officials. The Board has so far conducted 3,64,409 training programmes and has trained 1,08,86,498 workers at various levels till 31st March, 2007.

To generate awareness among the informal sector workers about various welfare schemes of the Central Government, the Board designed a new programme called Labour Welfare & Development programme through which detailed information of the relevant schemes are given to the participants besides extending the necessary help as and when required by them.

WORKERS SAFETY

SAFETY, HEALTH AND WELFARE OF WORKERS IN FACTORIES

The Factories Act, 1948 is the principal legislation for regulating various aspects relating to safety, health and welfare of workers employed in factories. This Act is a Central enactment, which aims at protecting workers employed in factories from industrial and occupational hazards. State governments and Union Territory Administrations frame rules under the Act and enforce provisions of the Act and rules through their factory inspectorate. The Directorate General, Factory Advice Service and Labour Institute (DGFASLI), Mumbai, an attached office of the Ministry of Labour and Employment , renders technical advice to the States / Union Territories in regard to administration and enforcement of the Factories Act, 1948. With five regional labour institutes at Mumbai, Kolkata, Kanpur, Chennai and Faridabad under its control, the DGFASLI also undertakes support research facilities and carries out promotional activities through education and training in matters concerning occupational safety and health. The Directorate General also reviews the position regarding implementation and enforcement of the Act.

Prescribing a 48-hour week for adult workers, the Factories Act forbids employment of children under 14 years of age in any factory. Minimum Standards of lighting, ventilation, safety and welfare services, which employers must provide in their factories, have also been laid down. Factories employing over 30 women workers are required to provide a crèche for their children, Shelters, rest-rooms and lunch-rooms are required to be provided by factories employing over 250 workers. Factories with 250 workers or more have to appoint welfare officers. The Factories Act was

amended in1987 in order to impose a general duty on employers to ensure health and safety of workers and on designers, manufacturers, importers and suppliers to ensure that articles designed, manufactured, etc., are without risk to the health and safety of workers. A new chapter for regulating safety and health aspect in hazardous industries was incorporated in the Act.

SAFETY IN PORTS AND DOCKS

Provisions relating to safety, health and welfare of workers employed in docks are contained in the Dock Workers (Safety, Health and Welfare) Act, 1986 and rules and regulations framed thereunder. The Act came into force on 15 April 1987. Enforcement of this Act in all the major ports is the responsibility of the Ministry of Labour and Employment and this responsibility is discharged through the DGFASLI, Mumbai. The DGFASLI, being the Chief Inspector of Docks is also entrusted with the responsibility of enforcing in major ports the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 framed under the Environment (Protection) Act, 1986.

SAFETY IN MINES

Provisions for safety, health and welfare of workers employed in mines are contained in the Mines Act, 1952 and rules and regulations framed thereunder. These provisions are enforced by the Ministry of Labour and Employment through the Directorate General of Mines Safety. The Directorate General, with its headquarters at Dhanbad and its zonal, regional and sub-regional offices spread all over the mining areas in the country undertakes its functions, inspection of mines, investigation of all fatal accidents and also certain serious accidents depending upon the gravity of the situation, grant of statutory permission, exemptions and relaxations in respect of various mining operations, approval of mines safety equipment, appliances and material, conduct examinations for grant of statutory competency certificate, safety promotional incentives including organization of national awards and national safety conference, etc.

NATIONAL SAFETY COUNCIL

The National Safety Council was set up in 1966 to promote safety consciousness among workers to prevent accidents, minimize dangers and mitigate human suffering, arrange programmes, lectures and conferences on safety, conduct educational campaigns to arouse consciousness among employers and workers and collect educational and information data, etc. National Safety Day is celebrated on 4th March every year to mark the foundation day of the National Safety Council.

AWARDS :

PRIME MINISTER'S SHRAM AWARDS

Prime Minister's Shram Awards are given to workmen working in the departmental undertakings and the public sector undertakings of the Central Government and State Governments in recognition of their outstanding contribution in the field of productivity and for showing exemplary zeal and enthusiasm in the discharge of their duties. These awards are also given to the workmen working in the manufacturing units in the private sector employing 500 or more workers. The awards, in order of precedence, are: Shram Ratna, Shram Bhushan, Shram Vir / Shram Veerangana and Shram Shree / Shram Devi. The awards carry presentation of a Sanad and Cash Prize

of Rs. Two Lakhs, Rs. One Lakh, Rs. 60,000 and Rs. 40,000 respectively. The total number of awards is 33.

NATIONAL SAFETY AWARDS

To give recognition to good safety performance on the part of the industrial undertakings and to stimulate and maintain the interest of both management and workers in accident prevention programmes, the Government instituted in 1965 the National Safety Awards. The scheme is applicable to factories, docks and Nuclear Power Projects & Nuclear Power Stations.

The National Safety Awards for mines were instituted in 1983. The scheme is meant for giving recognition to outstanding safety performances of mines of national level, which comes within the purview of the Mines Act, 1952. There are 34 awards, 17 winners and 17 runners-up, which are given to the management.

VISHWAKARMA RASHTRIYA PURASKAR

Shram Vir Awards, now known as Vishwakarma Rashtriya Puraskar were instituted in 1965. These are meant for workers of factories, mines, plantations and docks, and are given to them in recognition of their meritorious performance, which leads to high productivity or economy or higher efficiency. There are a total of twenty-eight awards in three classes, i.e. Class-A – 5 awards, Class-B – 8 awards and Class-C – 15 awards.

INDUSTRIAL RELATIONS

THE INDUSTRIAL DISPUTES ACT, 1947

The Industrial Disputes Act, 1947 basically provides for investigation and settlement of industrial disputes. The main objectives of the Act are: promotion of measures for securing and preserving amity and good relations between the employer and workmen; investigation and settlement of industrial disputes, between employers and employers, employers and workmen or workmen and workmen, with a right of representation by registered trade union or a federation or trade unions or an association of employers or a federation of associations of employers; prevention of illegal strikes and lock-outs; relief to workmen in the matter of lay-off and retrenchment; and collective bargaining.

The special provisions relating to lay off, retrenchment and closure are applicable to the establishments employing not less than 100 workmen on an average per working day. The Act also provides for protection in the shape of retrenchment compensation and notice to the workmen who have completed 240 days continuous service in the establishment in the preceding 12 months before effecting retrenchment, closure etc.

THE TRADE UNION ACT, 1926

The Trade Unions Act, 1926 provides for registration of trade unions of employers and workers, and, in certain respects, it defines the law relating to registered trade unions. It confers legal and corporate status on registered trade unions. The Trade Unions Act, 1926 is administered by the concerned State Governments.

The Trade Union Act, 1926 has been amended and the following amendments have been enforced from 9th January, 2002: No trade union of workmen shall be registered unless at least 10% or 100, whichever is less, of workmen engaged or employed in the establishment or industry with which it is connected are the members

of such trade union on the date of making or application for registration. In no case, a union shall be registered without a minimum strength of 7 members; a registered trade union of workmen shall, at all times, continue to have not less than 10% or 100 of the workmen, whichever is less, subject to a minimum of 7 persons engaged or employed in the establishment or industry with which it is connected, as its members; a provision for filing an appeal before the Industrial Tribunal / Labour Court in case of non-registration / restoration of registration has been provided; all office bearers of a registered trade union, except not more than one third of the total number of office bearers or five, whichever is less, shall be persons actually engaged or employed in the establishment or industry with which the trade union is connected; Minimum rate of subscription by members of the trade union has been revised as one rupee per annum for rural workers, three rupees per annum for workers in other unorganized sectors and 12 rupees per annum in all other cases.

INDUSTRIAL TRIPARTITE COMMITTEES

The Industrial Tripartite Committees have been constituted with the view to promote the spirit of tripartism. These tripartite bodies aim at deliberating on the industry-specific problems related to workers in that particular industry. These Committees are non-statutory and ad-hoc and their meetings are convened as and when required. At present, there are eight Industrial Tripartite Committees, one each for Engineering, Electricity Generation & Distribution, Road Transport, Chemical , Sugar Industry Cotton Textiles , Jute Industry and Plantation

SOCIAL SECURITY

THE WORKMEN'S COMPENSATION ACT, 1923

A beginning was made in Social Security with the passing of the Workmen's Compensation Act, 1923. The Act provides for payment of compensation to workmen and their dependents in case of injury and accident (including certain occupational diseases) arising out of and in the course of employment and resulting in disablement or death. The Act applies to railway servants and persons employed in any such capacity as is specified in Schedule II of the Act. It includes persons employed in factories, mines, plantation, mechanically propelled vehicles, construction works and certain other hazardous occupations. Minimum rates of compensation for permanent total disablement and death are fixed at Rs.90,000 and Rs.80,000 respectively. Maximum amount for death and permanent total disablement can go up to Rs.4.56 lakh and Rs.5.48 lakh respectively depending on age and wages of workmen.

THE MATERNITY BENEFIT ACT, 1961

The Maternity Benefit Act, 1961 regulates employment of women in certain establishments for a certain period before and after childbirth and periods for maternity and other benefits. The Act applies to mines, factories, circus industry, plantation, shops and establishments employing ten or more persons, except employees covered under the Employees' State Insurance Act, 1948. The State Governments can extend it to any other establishment or class of establishments. There is no wage limit for coverage under the Act.

THE EMPLOYEES' STATE INSURANCE ACT, 1948

The Employees State Insurance Act, 1948 is applicable in the first instance, to non-seasonal factories using power and employing 10 or more persons and non-power

using factories employing 20 or more persons. It covers employees drawing wages not exceeding Rs.10,000/- with effect from18.10.2006 01.04.2004. The Act provides medical care in kind and cash benefits in the contingency of sickness, maternity and employment injury and pension for dependents in the event of death of a worker because of employment injury. Full medical care including hospitalization is also being progressively made available to members of the family of the insured persons. With effect from 01.04.2005, the Employees State Insurance Corporation has introduced "Rajiv Gandhi Shramik Kalyan Yojana" for the workers covered under the Scheme, who lose their job involuntarily due to retrenchment, closure of factories/ establishments and permanent disability not arising out of employment injury. The beneficiaries under this Scheme are entitled to get a monthly cash allowance of about 50-53 percent of the wage as well as medical care for themselves and their dependant family members, for a maximum of six months which may be available in a single spell or in spells of not less than one month each.

The main benefits provided under the Act are medical care for the entire family of the Insured Person (IP), cash compensation for loss of wages on account of sickness, temporary and permanent disablement arising out of employment injury, periodical payments to dependants of Insured Person who dies due to employment injury, maternity benefit in cash to Insured Women and funeral expenses.

As on March, 2006 there were 144 ESI Hospitals, 42 Annexes, 28,308 beds including 4396 beds reserved in hospitals other than ESI hospitals/annexes, 1427 ESI dispensaries, 2135 clinics of Insured Medical Practitioners (IMPs) under the scheme. The total number of Insured Persons is 91.49 lakh which also includes 16,22,300 Insured Women. The total number of beneficiaries under the scheme is 354.96 lakh. The scheme is financed mainly through contributions from employers (4.75 percent of the wages) and employees (1.75 percent of the wages).

THE PAYMENT OF GRATUITY ACT, 1972

The Payment of Gratuity Act, 1972 is applicable to factories, mines, oil fields, plantations, ports, railways, motor transport undertakings, companies, shops and other establishments. The Act provides for payment of gratuity at the rate 15 days' wages for each completed year of service or part thereof in excess of six months subject to the maximum of Rs.3.50 lakh. In case of seasonal establishments, gratuity is payable at the rate of seven days' wages for each season. The Act does not affect the right of an employee to receive better terms of gratuity under any award or agreement or contract with the employer.

THE EMPLOYEES PROVIDENT FUNDS AND MISCELLANEOUS PROVISIONS ACT, 1952

The Act seeks to provide the financial social security to the employees in the form of provident fund, pension and deposit-linked insurance. It extends to the whole of India except the State of Jammu and Kashmir. It applies to every establishment specified in the Schedule and in which twenty or more persons are employed. The Central Government by notification in the Office Gazette may specify, any other establishment employing twenty or more persons or class of such establishments, to which the Act shall apply. At present the Act covers 182 specified industries/classes of establishments. Three schemes are framed under the Act viz, Employees Provident Fund Scheme 1952, Employees' pension Scheme 1995, Employees' deposit Linked Insurance Scheme 1976. The Central Board of Trustees (CBT) through Employees

Provident Fund Organisation (EPFO) administers the schemes. The CBT(EPF) is a tripartite body headed by the Hon'ble Union Minister of Labour and Employment. Employees Provident Fund Organisation (EPFO) has approximately 43 million subscriber enrolled in the three schemes. Employees Provident Fund Organisation provides various services ranging from collection of members' contribution from establishments to maintenance of members' accounts to actual disbursement of money under various defined benefit plans to members and their nominees.

EMPLOYEES PROVIDENT FUND SCHEME, 1952

The Employees Provident Fund Scheme, 1952 provides financial security to the employees in an establishment by providing a system of compulsory savings. The scheme covers the employees getting wages not exceeding Rs. 6500 per month. From 01.11.1990 onwards the employee becomes the member of the fund from the date of joining the factory / establishment. As on 31st march 2006, total number of establishment and factories covered were 444464 in which total membership was 429.53 lakh. During the year 2005-2006, 35633 new establishments and factories enrolling 18.43 lakh new members were brought under the purview of the Act. A Death Relief Fund (DRF) has been set up under the Employees' Provident Fund Scheme. As a measure of immediate relief, upto Rs. 2000 is admissible to the nominees / heirs of such of the deceased member whose pay, at the time of death, does not exceed Rs. 1500 / - per month, in case the death has occurred on or after 01.04.1988.

THE EMPLOYEES' PENSION SCHEME, 1995

The Employees' pension Scheme, 1995 came into effect from 16th November 1995 and aims at providing for economic sustenance during old age and survivorship coverage. The new entrants to the membership of Provident fund from 16.11.95 will also acquire membership of the Scheme on compulsory basis. On the introduction of EPS 95 the erstwhile Employees' Family Pension Scheme, 1971 ceased to operate and its existing members compulsorily became the members of the new Scheme. A minimum of 10 years service is required for entitlement to pension. The total membership of EPS 95 as on 31st march 2006 is 324 lakh out of which net addition during 2005-2006 is 12.4 lakh. The quantum of pension payable to a member shall correspond to the sum of pensionable service (i.e. service after 16.11.95) benefit and past service (i.e. service before 16.11.95) benefit.

Total number of beneficiaries as on 31.03.2006 is 23.36 lakh. The Employees' Pension Scheme, 1995 provides the following benefits to members and their families.

- Monthly member Pension
- Permanent total disablement Pension
- Return of Capital
- Commutation up to 1 / 3rd of pension amount
- Widow / widower Pensioner
- Children Pension
- Orphan Pension
- Disabled Children
- Nominee Pension
- Pension to dependent Father / Mother

The Scheme is financed by diversion of 8.33% of wages from employer's share

of Provident fund contribution and Central Government Contributes at the rate of 1.16% of the wage of the employee. The upper wage limit was raised from Rs. 5000 to Rs. 6500 with effect from 1st June 2001. As on 31.03.2006 the corpus stands at Rs. 70749.13 crore.

THE EMPLOYEES' DEPOSIT LINKED INSURANCE SCHEME, 1976

Another important social security measure, Employees' deposit Linked Insurance Scheme, 1976, was introduced for members of the Employees' Provident Fund and exempted Provident Funds with effect from 1st August, 1976. On the death of an employee, while in service, who is a member of the Employees' Provident Fund or of the exempted Provident Fund, the persons entitled to receive the provident fund accumulations would be paid an additional amount equal to the average balance in the provident fund account of the deceased during the preceding 12 months. The maximum amount of benefit payable under the Scheme is Rs. 60000 and the employees do not have to make any contribution to it.

EMPLOYMENT AND TRAINING

To help the youth build their career, the Directorate General of Employment and Training (DGE&T) has evolved various training programmes. These are formulated within the national framework as far as possible and also in collaboration with foreign countries and financial assistance from GOI and World Bank etc..

Craftsmen Training: Industrial Training Institutes (ITIs) were set up all over the country to impart skills both in engineering and non-engineering trades to young men and women in the age group of 14-40 years. By 31.03.2007, 5419 such institutes with a total capacity of about 7.90 lakh were providing training to school leavers in the country. At present, 110 trades are covered under the scheme. The duration of the course varies from 6 months to 3 years for engineering and non-Engineering trades. Educational qualifications for admission vary from eighth standard to 12th standard depending upon the trades. Some State Governments and Union Territories have introduced training in certain trades to meet the requirements of local industries under the jurisdiction of state councils for vocational training.

Apprenticeship Training Scheme : The Apprentices Act, 1961 makes it obligatory for employers in specified industries to engage apprentices for undergoing Apprenticeship Training, which varies from six months to four years. The training consists of basic training followed by on-the-job or shop floor training in accordance with standards prescribed by the Government in consultation with the Central Apprenticeship Council. Presently 154 trades are designated for trade apprentices and 2.5 lakhs seats located in establishments in Central and State Public Sector & Private Sector. The Act was amended in 1973 to include training of Graduate and Diploma Engineers as "Graduate" & "Technician" Apprentices. The Act was again amended in 1986 to bring within its purview the training of 10+2 vocational stream as "Technician (Vocational)" Apprentices 104 subject fields have been designated for the category of Graduate & Technician apprentices and 95 for the category of Technician (Vocational) apprentices. 82,154 seats are located for these categories.

Women's Vocational Training Programme: Vocational Training facilities for women in the country are organized through a network of 356 Women Industrial Training Institutes and 527 Women wings in general ITIs / private WITIs with a seating capacity of about 48,014 under the control of State Governments.

National Council for Vocational Training has recommended that in general

ITIs upto 25 per cent of the sanctioned seats may be reserved for women candidates. These seats could be filled up based on general reservation policy of each of the State / UT. Under the Vocational Training programme, managed directly by the Central Government and a National Vocational Training Institute (NVTI) for Women, NOIDA as an apex centre and Ten Regional Vocational Training Institutes (RVTIs) for Women at Mumbai, Bangalore, Thiruvananthapuram, Hisar, Kolkata, Tura, Allahabad, Indore, Vadodara and Jaipur have been set up with an intake capacity of 3344 in basic, advanced and instructional skills. Besides this, short-term courses are also organized as per availability of infrastructure facilities. Till March, 2006 about 49,275 women have been trained in these institutes since inception.

Craft Instructors Training: Advanced Training Institutes (ATIs) at Howrah, Mumbai, Kanpur, Ludhiana and Hyderabad and Hyderabad and Central Training Institute for Instructors at Chennai were established in 1960s to train instructor trainees in the techniques of imparting industrial skills, who in turn train and make available skilled manpower for industry. These institutes with a seating capacity of 1099 offer a series of one-year courses, which provide comprehensive training, both in skill development and principles of teaching. Refresher courses are also conducted to update and upgrade the knowledge and skill of the instructors and keep them abreast of technological developments in industry. Facilities for training of instructors in some selected special trades continue to be available in farm mechanic trades at ATI, Ludhiana and Mechanic Machine Tool Maintenance trade at ATI Kanpur, Howrah and Ludhiana where seats for scheduled caste and scheduled tribe candidates are reserved as per the Central government norms. A course on Principles of Teaching of three months duration has been introduced in 11 institutes to train large number of untrained instructors.

Advanced Vocational Training Scheme: Advanced Vocational training Scheme was launched in October 1977 for training of highly skilled workers and technicians in a variety of advanced and sophisticated skills not available for other vocational training programmes. Regular full time courses of two to 12 weeks duration are offered under the scheme in a variety of advanced skill areas. The scheme was introduced in six advanced training institutes located at Mumbai, Kolkata, Hyderabad, Kanpur, Ludhiana, Chennai and 16 selected industrial Training institutes under 15 state governments. These institutes were modernized to conduct various advanced courses under the scheme as per requirement of the local industry.

National Instructional Media Institute (NIMI): National Instructional Media Institute (NIMI), Chennai has been set up to make available well prepared Instructional material for the use of the trainees and trainers in (i) Industrial Training Institutes (ITIs) and (ii) Industries and establishments implementing the Apprenticeship Training programme. The institute develops Instructional Media Packages (IMPs) comprising Written Instructional Material, Transparencies & Charts for different trades. So far, 138 Titles for 20 trades have been developed in English; out of which 48 Titles for 11 trades have been translated in Hindi. IMPs of 8 trades have been translated in Tamil of which 34 books have been published.

Foremen Training / Supervisory Training: Training programmes for supervisors / foremen for industry are organized at two Foremen Training Institutes located at Bangalore and Jamshedpur.

Central Staff Training And Research Institute: The Government in collaboration with the Government of Republic of Germany has set up the Central staff Training

and Research Institute, Kolkata in 1968. The Institute has three wings - Training, Research and Development. The training wing provides training to the executives and administrators of vocational and industrial training in the country. The Research wing conducts problem-oriented studies on different aspects of vocational training and the Development wing is to develop and disseminate instructional material and, aid / model for effective execution of industrial.

INITIATIVES UNDERTAKEN IN THE RECENT PAST

Upgradation Of 500 Existing ITIs Into Centers Of Excellence: Union Finance Minister in his Budget Speech 2004-05 and reiterated again in the Budget Speech 2006-07, had announced measures for upgradation of 500 ITIs in the country. The objective of the scheme is to upgrade the existing 500 ITIs into "Centers of Excellence (CoE)" for producing multi skilled workforce of world standard. The highlights of the scheme are introduction of multiskilling courses during the first year, followed by advanced / specialized modular courses subsequently by adopting industry wise cluster approach, multi entry and multi exit provisions, and Public-Private-Partnership in the form of Institute Management Committee (IMC) to ensure greater & active involvement of industry in all aspects of training. Curricula of 96 modules of Broad Based Training courses covering 20 sectors and 57 advanced modules covering 13 sectors have been developed and finalized.

The first 100 CoEs are being funded through domestic recourses and 400 ITIs through World Bank assistance. On 5th June 2007, World Bank has communicated the approval of a credit in the amount of 280 million $US. Approval of CCEA is being sought for. So far, 200 new ITIs have been upgraded into "Centers of Excellence (CoE)" to make world class technicians, 300 more to be developed in next 3 years. The remaining 1396 Govt. ITIs to be upgraded as CoE under Public Private Partnership (PPP) Mode upto year 2012.

Testing And Certification Of Skill Acquired Through Non-Formal Means: A new scheme of 'Testing and Certification of Skills' acquired through informal means has been taken up on a pilot basis. To start with, the Construction Industry Development Council (CIDC), which has been engaged as one of the agencies for this programme, has tested and certified around 8400 construction workers so far. Another Construction Agency, namely, National academy of Construction, Hyderabad has recently been identified as the other agency of testing and certification of skills of workers in Construction sector. Competency Standards have been developed for 46 skill areas. The competency standards for several other skill areas are also being developed. The Scheme is already being implemented in the States of Punjab, Kerala, Tamil Nadu and Jammu and Kashmir.

"Establishment of Industrial Training Institutes (ITIs) in North-Eastern States and Sikkim and the State of Jammu & Kashmir"

A hundred percent centrally sponsored scheme for upgrading the 37 existing ITIs in the State of Jammu and Kashmir and for setting up of new Women ITI at Jammu has been taken up during the financial year 2005-06. After the scheme is fully implemented, it would result in an increase of 1836 training seats in the State. A hundred percent centrally sponsored scheme for the North Eastern states including Sikkim, with a total outlay of Rs.100 crores, for establishing 22 new ITIs and upgrading 35 existing ITIs is under implementation. Civil work for 16 ITIs out of 22; and Upgradation of 30 ITIs out of 35 existing ITIs has already been completed. This will result in doubling the seating capacity in ITIs from 7244 to 16,144.

Skill Development Initiative: A new scheme – “Skill Development Initiative” for imparting vocational training / testing of competencies to one million persons over a period of five years by imparting short-term training courses with an outlay of Rs.550 crore has been taken up.

Employment: Employment in the organized sector, i.e., in all public sector and non-agricultural establishments employing 10 or more persons in private sector marginally increased from 264.43 lakh in March 2004 to 264.58 lakh in March 2005 recording an increase of 0.1 per cent. The increase in private sector employment during 2004-05 was 2.5 per cent.

National Employment Service: The national Employment Service (NES) has a network of 947 employment exchanges / Universities Employment Information and Guidance Bureau (UEIGBx) as on August 2006. The exchanges assist all employment seekers including special groups like handicapped, ex-servicemen, scheduled castes and scheduled tribes, women, etc. through placement against jobs notified by employers. NES also carries out other functions such as vocational guidance and employment counseling, coordination and dissemination of employment market information and conducts studies in the field of employment and occupational research with a view to generate data for framing employment and manpower policies.

Under the Employment Exchanges (Compulsory Notification of Vacancies), Act, 1959, it is obligatory for all establishments in public sector and such of those non-agricultural establishments in private sector which employ 25 or more workers to notify their vacancies (with certain exemptions) to Employment Exchanges and supply periodic information as prescribed in the Act, the rules there under. Development of these programmes at the national level, particularly in the area of evolving common policies, laying down common standards and procedures, training of officers and evaluation of the programmes is the responsibility of the Central Government. The day-to-day administration of the employment exchanges on the other hand, rests with the State Governments / UT Administrations. There are 43 special exchanges for physically handicapped. Twenty vocational rehabilitation centers provide a comprehensive package of rehabilitation services to the physically challenged.

Vocational guidance: Vocational guidance and employment counseling services are provided to youth (applicants without any experience) and adults (with specific work experience). Such units were functioning in 386 Employment Exchanges as on Sep. 2006. In addition, Employment Information and Guidance Bureaus are functioning in 82 Universities. These units assist applicants and youth in planning their career. A special scheme operates in 22 selected districts on a pilot basis to motivate and guide job seekers to take up self-employment.

SC / ST Job Seekers; Coaching-un-Guidance Centers for scheduled castes and scheduled tribes provide registration guidance, pre-submission guidance, confidence building training, pre-recruitment training and special coaching in typing and shorthand to job-seekers.

21 Mass Communication

IN a country like India, mass communication plays an important role in creating people's awareness about national policies and programmes by providing information and education, besides healthy entertainment. It helps people to be active partners in the nation-building endeavour. The Ministry of Information and Broadcasting is responsible for development and regulation of information, broadcasting and film sectors in the country. The Information Sector includes the Print Media which is regulated by the Press Council of India. In addition, the information sector includes the following media units of the Government viz. Press Information Bureau, Photo Division, Registrar of Newspapers for India, Research, Reference and Training Division, Directorate of Publications Division, Directorate of Advertising and Visual Publicity, Directorate of Field Publicity, Song and Drama Division. The Broadcasting sector consists of Prasar Bharati formed by an Act of 1997 by subsuming Doordarshan and All India Radio under it. In addition, the broadcasting sector has about 100 private channels and cable network all over the country. Film making is in the non-government sector. The Government presence in this sector consists of Films Division, Directorate of Film Festivals, National Film Development Corporation, the Central Board of Film Certification, National Film Archives of India, and Childrens Film Society. The Government has set-up two film and television institutes, one at Pune and the other at Kolkata.

The Government has reviewed the Print Media Policy and opened up the News Sector for FII's, NRI's and PIO's. Earlier only FDI up to 26 per cent in the sector was permitted. In the non-News Sector also the limit has been enhanced to 100 per cent from the previous limit of 74 per cent.

A new policy of expansion of FM Radio broadcasting service through private agencies (Phase-II) was approved on 30 June 2005 and was notified on 13 July 2005. The Government invited bids from Indian companies for 337 FM Radio channels in 91 cities out of which 280 were successfully bid.

The Government of India issued Policy Guidelines for downlink of television channels on 11 November 2005, which provide that no person / entity shall downlink a channel that has not been registered with the Ministry of Information and Broadcasting. Permission is required from the Ministry in accordance with the terms and conditions prescribed under these guidelines.

All programmes of satellite TV channels, transmitted / retransmitted through cable network service are required to adhere to the Programme Code and Advertising Code prescribed under the Cable TV Networks (Regulation) Act, 1995 and rules framed thereunder. To strengthen the content regulation mechanism, the Government has taken necessary steps.

In the competition section of International Film Festival of India (IFFI-2005), entries were extended to two more continents, Africa and Latin America besides Asia.

Inter-governmental co-production agreements are usually umbrella agreements, under which private; quasi-government or government agencies may enter into contracts to produce films together. Such films are treated as national

films in both countries. The Government of India has entered into an audio-visual co-production agreement with the Government of Italy in May 2005. India has also entered into film co-production agreements with Great Britain and Northern Ireland in December 2005. The agreement with Britain is finalised which could pave the way for many fruitful associations between the two countries.

PRASAR BHARATI

Prasar Bharati is the public service broadcaster in the country, with All India Radio and Doordarshan as its two constituents. It came into existence on 23 November 1997, with a mandate to organise and conduct public broadcasting services to inform, educate and entertain people and to ensure balanced development of broadcasting on radio and television.

The major objectives of the Prasar Bharati Corporation, as laid out in the Prasar Bharati Act, 1990, are as follows: i) Upholding the unity and integrity of the country and the values enshrined in the Constitution; ii) Promoting national integration, iii) Safeguarding citizen's rights and to be informed on all matters of public interest and presenting a fair and balanced flow of information; iv) Paying special attention to the fields of education and spread of literacy, agriculture, rural development. Health and family welfare and science and technology; v) Creating awareness about women's issues and taking special steps to protect the interests of children, the aged and other vulnerable sections of society; vi) Providing adequate coverage to the diverse cultures, sports and games and youth affairs; vii) Promoting social justice, safeguarding the rights of working classes, minorities and tribal communities; and viii) Expanding broadcasting facilities and promoting research and development in broadcast technology.

Headquartered in Delhi, the Corporation is governed by the Prasar Bharati Board, which comprises a Chairman/Executive Member (also known as Chief Executive Officer), a Member, a representative of the Ministry of Information and Broadcasting and Directors General of All India Radio and Doordarshan as ex-officio Members. The Chairman is a part-time member with a six-year tenure. The Executive Member, the Member (Finance) and the Member (Personnel) are whole-time members with a six-year tenure, subject to the age limit of sixty two years. The Prasar Bharati Board meets from time to time and deliberates on important policy issues and gives directions to the executive for implementation of policy guidelines.

ALL INDIA RADIO

Radio Broadcasting started in India in the early 1920's. The first programme was broadcast in 1923 by the Radio club of Bombay. This was followed by setting up Broadcasting Services in 1927 with two privately-owned transmitters at Bombay and Calcutta. The Government took over the transmitters in 1930 and started operating them under the name of Indian Broadcasting Service. It was changed to All India Radio (AIR) in 1936 and it came to be known as Akashvani from 1957.

AIR was earlier an attached office of the Central Government under the Ministry of Information and Broadcasting, which has now been brought under Prasar Bharati, (Broadcasting Corporation of India) Act, 1990. The primary objective of the Corporation as laid out in Section 12 of the Prasar Bharati Act is, amongst other things, to organise and conduct public service broadcasting to inform, educate and entertain the public and to ensure a balanced development of broadcasting on Radio & TV.

All India Radio is headed by a Director General, who is assisted, on the technical side, by one engineer-in-chief and he, in turn, is assisted by four Chief Engineers. At the zonal level there are five zonal offices of Chief Engineers at Chennai, Mumbai, Kolkata, Guwahati and Delhi. These Zonal Offices are responsible for implementation of projects of AIR. In respect of programmes at the Directorate level, the Director General is assisted by six Dy. Directors General. In matters of administration, he is assisted by one Dy. Director General. In respect of news, he is assisted by a Director General (News), the head of the News Services Division. For financial matters, the Director General is assisted by an Additional Director General (Finance). Also, there are six offices of Regional Dy. Director General at Delhi & Chandigarh (NR 1 & II), Mumbai (WR 1 & II), Chennai & Bangalore (SR 1 & II), Kolkata (ER I & II), Lucknow & Bhopal (CR 1 & II) and Guwahati & Aizawl (NER I & II). The charge of security is with a Dy. Director General, who is assisted by an Assistant Director General.

NETWORK GROWTH OF AIR

Radio broadcasting began in India in the early 1920's. The first programme was broadcast in 1923 by the Radio Club of Bombay. This was followed by the setting up of a Broadcasting Service in 1927 on an experimental basis in Bombay (Mumbai) and Calcutta (Kolkata). The Government took over the transmitters and began operating them under the name Indian Broadcasting Service. It was changed to All India Radio in 1936.

(A) Growth of Network & Coverage : When India attained independence in 1947, AIR had a network of six stations and 18 transmitters. The coverage was 2.5 per cent of the area and just 11 per cent of the population. All India Radio, since independence, has become one of the largest broadcasting networks in the world. AIR today has a network of 225 broadcasting centres covering 91.42 per cent of the area and 99.13 per cent of the population and number of transmitters is 361.

For radio coverage of the population living in remote uncovered areas of the country mainly in the Northeast, J&K, Himachal Pradesh and Uttaranchal, LPT relay centres with 100 Watt FM transmitters are proposed to be installed. The FM Service uses a large bandwidth to provide a programme service of high-fidelity.

PROGRAMME ACTIVITES

- Akashvani Sangeet Sammelan concerts were organized at 21 Stations of AIR across the country on 7th and 8th October 2006 featuring artists of both Hindustani and Carnatic music.
- AIR introduced regional Folk & Light Music Festival at par with Akashvani Sangeet Sammelan. The purpose of this regional Folk & Light Music Akashvani Sangeet Sammelan is to project, promote & propagate the rich folk cultural heritage of our country.
- To scout new talent All India Radio organizes All India Music Competition. AIR music competition is a regular feature of AIR to reach & hunt new talent among youth. Final competitions were held at Delhi and Chennai for Hindustani and Karnatic Music respectively during the month of October-November, 2006. This year a numberof new talents of the category of Hindustani/Karnatic Music have ben added.
- AIR has stepped up its activity of Agriculture Broadcast with launch of

exclusive Project Mass Media Support to Agriculture Extension with the title Kisan Vani for AIR from 15th February, 2004 in collaboration with Ministry of Agriculture to inform local farmers the daily market rates, weather reports and day to day activities in their area at micro level. Presently 'Kisan Vani' is being broadcast and relayed from 96 FM Stations of AIR.

- Extensive programmes on land and water conservation, sustainable agriculture, biotechnology, integrated pest management in crops, crop insurance schemes, environment protection, disaster management, role of panchayatsin rural development etc. were broadcast regularly.
- Special programmes were produced and broadcast on the World Environment Day. A daily programme "Vasundhara" is being broadcast from a number of stations.
- AIR stations broadcast more than 15,000 programmes on Health & Family Welfare in each month. Thrust of the programmes was on promoting motivational measures for adoption of the small family norms and reproductive Child health care programmes.
- All India Radio, broadcast programmes constantly on HIV/AIDS in a large number of languages and dialects. Programme heads of all A.I.R. Stations were advised to provide full publicity support to educate and inform the audience about the dreaded disease of AIDS which can be prevented by proper preventive measures.
- Programmes directed towards women listeners cover subjects related to socio-economic development of women, health and family welfare, food and nutrition, scientific home management, women entrepreneurship, education, including adult education and gender issues.
- Fixed chunks were given for educational broadcast for the students as well as for the teachers in collaboration with the National Council of Educational Research & Training (NCERT) and Central Institute of Educatiional Technology (CIET). Besides, educational programmes of the Indira Gandhji National Open Universtiy (IGNOU) were broadcast from AIR stations.
- Radio adaptations of outstanding novels, short stories and stage plays were also broadcast. Serials projecting current socio-economic issues like unemployment, illiteracy, environment pollution, problems of the girl child etc., were broadcast on regular basis. The National Programme of play is broadcast on fourth Thursday of every month at 9.30 p.m.
- Live coverage given to Centenary of 'Adoption of Vande Matram as a National Song' on 7.9.06.
- Live broadcast of function on completion of 100 Years of launching of First Satyagrah Movement in South Africa by Mahatma Gandhi on 8.10.2006.
- Live coverage of the opening ceremony on 7th January, 2007 and Veledictory function of the Pravasi haratiya Divas-2007 on 9th January, 2007.
- Regular publicity was and is being given to National Common Minimum Programme on each of the following thrust areas viz.

  1. Employment Opportunities, 2. Agriculture Growth, 3. Education & Programmes for welfare of adolescents & youth 4. Health, 5. Women and Children, 6. Food and Nutriton, 7. Panchayati Raj, 8. SCs and STs, 9. Social

harmony and Welfare of minorities including PM's special 15 point Programes for welfare of Minorities, 10. Industry, 11. Infrastructure Development, 12. Development of J&K, North East and Border States.

Special mention can be made of the publicity given to schemes such as Rural Employment Guarantee Act. The Immoral TrafficPrevention Amendment Bill, 2006, Publicity of the Citizens Charter, International Day of the Elderly Celebration, Preventing Employment of Children below 14 years as domestic servant, welface of Schedule Caste and Schedule Tribes etc., formulated by the various central Ministries / Departments.

- Consequent upon the coming into force of the Right to Information Act, 2005, vigorous publicity to this Act and was is being provided. Programme Heads of the all AIR Stations have been asked to highlight the salient features of this Act in their programmes & Action Taken Report to Directorate.
- AIR devoted about 51 per cent of the airtime for programmes on art and culture, women's education, environment, sports, rural development and such other public service broadcasts.
- Sardar Patel Memorial Lecture in English was organised in Chennai on 28th October 2006. Shri N.RAM, Editor in Chief, The Hindu, delivered the lecture on the subject "Media & Society In India: Freedom, Rules and Responsibilities" Its recording was broadcast on national hook-up on 31st October, 2006 on the occasion of the birth anniversary of Sardar Vallabhbhai Patel.
- Dr. Rajendra Prasad Memorial Lecture in Hindi was organised at Patna on 17th November, 2006. Dr. Anil Sadgopal,eminent educationist delivered the lecture on the subject "Shiksha, Samanata aur Bharat ki Samprabhuta" Its recording was broadcast

AIR News-on-Phone Service : The listeners can listen to AIR's news highlights on telephone by just dialing a specific telephone number at any time from anywhere in the world. The service is now operational in eight cities : Delhi, Mumbai, Patna, Chennai, Hyderabad, Ahmedabad, Bangalore and Thiruvananthapuram. The service is being extended to another 7 stations.

Computerisation of Network : A number of softwares have been developed for information exchange and improvement of efficiency in the working of various units of AIR. Web based e-mail service at headquarters has been introduced. All the stations and directorate have now been provided with the e-mail accounts with corporate identity xyz@air.org.in 38 AIR stations in remote places not having PCs were computerised.

NEWS SERVICES DIVISION

The News Services Division (NSD) is the news wing of All India Radio. The headquarters of NSD is in New Delhi. It has 44 Regional News Units (RNUs) across the country, which are located in all the State capitals and some bigger States have two or more RNUs. Besides these 44 RNUs, NSD has its correspondents at 12 other important news centres in the country. It has four Special Correspondents in the immediate neighbourhood in Colombo, Dhaka, Kathmandu and Kabul and three more in Dubai, Brussels and Washington. NSD has a comprehensive presence across the country with about 110 full-time Correspondents Editors and 419 part-time Correspondents (PTCs) posted / positioned at various places. The process of selection

of PTCs in respect of remaining 150 district headquarters is underway. It is the only news organisation to have its representative - regular or part-time - in almost all the districts of the country.

News Bulletins : NSD and RNUs produce news bulletins and Current Affairs Programmes on All India Radio. NSD's bulletins are available not only in India but also in many foreign countries. NSD mounts over 389 news bulletins daily in 82 languages / dialects (Indian and foreign). This includes the 22 official languages included in the Eighth Schedule of the Constitution and 15 foreign languages. These bulletins are broadcast on both the Primary and FM channels of All India Radio.

The Home, Regional and External services of AIR broadcast news bulletins for duration of over 48 hrs. from Delhi and its RNUs. Eighty-nine news bulletins are broadcast in the Home Service from Delhi. The RNUs put out over 235 news bulletins daily for a duration of over 24 hours in 66 languages / dialects in the regional services. These include news headlines broadcast on FM Rainbow channels and some bulletins exclusively mounted on FM Gold channel. In the External Services, AIR broadcasts 65 news bulletins in Indian and Foreign languages for a total duration of nearly nine hours.

NEWS BASED PROGRAMMES

The News Services Division puts out a number of current affairs and news-based programmes in English, Hindi and other languages. Current affairs and News-based programmes are also being broadcast by RNUs. These programmes are broadcast on a daily and weekly basis and include discussions and interviews with newsmakers, experts, politicians, journalists and academicians. The daily programmes - Samayiki, News Analysis and Spotlight - highlight the issues of the day. The weekly programmes are broadcast on various themes. These include Current Affairs, Money Talk, Countrywide, The Human Face, Charcha ka Vishay Hai, Vaad-Samvaad and Surkhiyon Se Pare. Besides, daily commentaries in Urdu, Kashmiri and Dogri are broadcast from NSD. Similar commentaries and news programmes are broadcast by RNUs.

Composite news programmes and news magazines, in Hindi and English, are broadcast from Delhi every morning and evening for a duration of 30 minutes each on FM Gold. These include 'Samachar Savera' in Hindi and 'Breakfast News' in English in the morning and 'Samachar Sandhya' in Hindi in the evening. FM Gold has also specialised Programmes like 'Market Mantra' (Business Magazine) and 'Sports Scan' (Sports Magazine). In some of these programmes, such as Market Mantra, there is a public participation. The experts in the Studio reply to queries from the public.

Parliament Coverage : NSD gives special coverage to Parliament during the sessions. The daily review called "Today in Parliament' in English and 'Sansad Sameeksha' in Hindi are broadcast by NSD. These daily reviews give an account of the days' proceedings in both Houses of Parliament - with a section devoted to Lok Sabha and Rajya Sabha each. Weekly reviews in English - 'This Week in Parliament' and in Hindi 'Is Saptah Sansad Mein' - sum up the important highlights of the proceedings in both Houses during the preceding. Daily and weekly reviews of the proceedings of the State Legislatures are also broadcast by the concerned RNUs.

NEWS ON PHONE (NOP)

In recent years AIR news has taken the path of innovation and diversification in

delivery of news to people. One such successful effort has been the 'News on Phone' service. The service provides the latest news highlights in Hindi, English and regional languages to a listener anywhere in India or abroad on phone on dialing the specified numbers. For the national news highlights, listeners can call up NSD's NOP service in Delhi (English) 011-23324242 and 23321258, Hindi 011-23324343 and 23321259). Listeners in Delhi can access the service by dialing only 1258 for Hindi and 1259 for English 'News on Phone' service is also available in Tamil from the regional News Unit at Chennai, in Telugu from Hyderabad, in Marathi from Mumbai, in Hindi from Patna, in Gujarati from Ahmedabad, in Kannada from Bangalore and in Malyalam from Thiruvananthapuram. This service is proposed to be extended to Raipur, Lucknow, Shimla, Guwahati, Imphal and Jaipur very soon.

NEWS ON INTERNET

AIR news is also available on the Internet. The official website of NSD www.newsonair.com is being accessed by wider audience.

A major initiative to bring Real Radio on the Internet has been achieved by making available audio of the news bulletians on the website. The five-minute hourly bulletins are now available on the website. The major news bulletins at 0800 hrs., 0815 hrs., 2045 hrs., and 2100 hrs. are available with audio on the website.

The NSD website carries audio dispatches from AIR Correspondents along with the scripts of top news items on the home page. The Current Affairs interactive programme 'Spotlight' can also be heard on the website.

The NSD has provided the scripts of Hindi news bulletins in Devnagari on the website for the Internet users. Hindi news headlines are also available on the website.

Regional language bulletins with audio are available on NSD's website. Internet users can listen Marathi, Kannada, Gujarati, Tamil, Telugu, Bengali, Punjabi and North Eastern bulletins in English using Internet. These bulletins are of special interest to non-resident Indians who can now keep abreast of listen to even the local happenings in their States while being in the US, Europe, Africa or any part of the world.

Cricket scores and city weather are also available on the website.

EXTERNAL SERVICES DIVISION

All India Radio entered the realm of external broadcasting shortly after the out break of the Second World War on 1 October 1939 - when it started a service in Pushtu for listeners across - what was then the country's North-West Frontier. The service was designated to counter radio propaganda from Germany, directed to Afghanistan, Iran and Arab countries. With the end of the War, the need of continuing certain services was assessed and the number of services was rearranged. The External Services Division of AIR has been a vital link between India and rest of the World, specially with those countries where the interest of India are intertwined because of Indian population, staying in those countries. Indians, who left their home decades ago in search of better life today live on every part of the globe and are still interested to know what "the country of their birth" holds for them. Naturally External Services Broadcast has been projecting the Indian point of view on matters of National and International importance through its various programmes.

The External Services Division of All India Radio ranks high among the External

Radio Networks in the world both in reach and range covering about 100 countries in 27 languages, 16 of them foreign and 11 Indian, with an enormous programme output of about 70 hrs 30 mts. everyday. All India Radio through its external broadcasts keeps the overseas listeners in touch with the ethos of India and things that are Indian, reflecting the ideas and achievements of India as an open society.

The foreign languages are Arabic [3 hrs. 15 mts.], Baluchi [1 hr.], Burmese [1 hr. Mts.], Chinese [1 hr. 30 Mts.], Dari [1 hr. 45 Mts.], French [45 Mts.], Indonesian [1 hr.], Nepali [3 hrs.], Persian [1 hr. 45 mts.], Pushtu [2 hrs.], Russian [1 hr.], Sinhala [2 hrs. 30 Mts.], Swahili [1 hr.], Thai [45 Mts.], Tibetan [1 hr. 15 Mts.], and English (GOS) [8 hrs. 15 Mts.].

The Indian languages are Hindi [5 hrs. 15 Mts.], Tamil [5 hrs. 30 Mts.], Telugu [30 Mts.], Bengali [6 hrs. 30 Mts.], Gujarati [30 Mts.], Punjabi [2 hrs.], Sindhi [3 hrs. 30 Mts.], Urdu [12 hrs. 15 Mts.], Saraiki [30 Mts.], Malayalam [1 hr.], Kannada [1 hr.].

The broadcasts follow a composite pattern and generally comprise of News Bulletins, Commentaries, Current Events and Review of the Indian Press. Besides Newsreel, Magazine programmes on sports and literature, talks and discussions on social economic, political, historical, scientific and cultural subjects. Features on developmental activities, important events and institutions, classical, folk and modern music of India’s diverse regions, form a major part of total programme output.

The dominant theme of all programmes in External Services Division is to present the reality of India as a strong Secular Democratic Republic vibrant, forward looking and engaged in the task of rapid economic, industrial and technological progress. The fact of India’s large technical manpower and its achievements and ecological balance are put across in easy and simple parlance.

Similarly, India’s faith in non-violence, its commitment to restoration of human rights and international peace and its contribution to the creation of a new world economic order are frequently discussed.

The largest areas of External Services Division span almost all the continents and include areas of East, North-East and South-East Asia, West Asia, West, North-West and East Africa, Australia, New Zealand, U.K., Europe and of course the Indian Sub-Continent. In addition to the foreign languages, External Services Division also broadcast in Indian languages for our people settled in different parts of the globe. The services in Hindi, Tamil, Telugu, Gujarati, Malayalam and Kannada are directed to Indians Overseas. While those in Urdu, Bengali, Punjabi and Sindhi are meant for the listeners in the sub-continent and the bordering countries to project the image of modern, progressive and resurgent India committed to the principle of democracy, socialism, international peace and co-existence.

The External Services Division continues to supply recordings of music, spoken word and composite programmes to about 21 foreign broadcasting organisations under the existing Cultural Exchange Programme.

The External Services Division’s transmission directed to SAARC countries, West Asia, Gulf and South East Asian countries continues to carry the 9.00 p.m. national bulletin in English, originally meant for Home Services. This apart, External Services Division continues to beam all across the globe, commentaries on contemporary and relevant issues and press reviews in all its transmissions.

Adding another feather to its cap, the External Services Division has started digital transmission from its new set up installed in the New Broadcasting House. All modern gadgets and equipments are being used to attract as many listeners as possible. Introduction of Internet broadcasting by All India Radio has enabled its listeners in parts of the world like USA, Canada, West and South Africa to avail of AIR's Services on Internet. A 24 hrs. Urdu Service of External Services Division is to be made available on air through DTH.

As a "Voice of the Nation", External Services Division of All India Radio has been India's "Authentic Window to the World". With growing prestige of India in the world, an increasingly important role is envisaged for External Broadcast for times to come.

MARKETING DIVISION

In the recent years, Prasar Bharati while fulfilling its mandate as a Public Service Broadcaster has also been making concrete efforts to augment its revenue generation by way of considerable and aggressive marketing of its in-house programmes and also producing customised programmes. Setting up of Marketing Division at Mumbai, Chennai, Bangalore, Hyderabad, Delhi, Kolkata, Kochi, Thiruvananthapuram and Guwahati is a step in this direction.

These Marketing Divisions provide their clients a hassle-free - single window booking for all the channels of All India Radio and Doordarshan. With AIR and Doordarshan's vast network and a reach beyond comprehension, Marketing Divisions help the clients reach the length and breadth of the country and that too sitting in one place.

By tapping various sources having revenue potential and by facilitating the clients - Marketing Division Delhi alone has been able to procure a business worth Rs. 71 crore approximately in the financial year 2005-06.

Some of the major clients include Ministry of Agriculture and Cooperation, Ministry of Rural Development, National AIDS Control Organisation, Department of Elementary Education and Literacy, Directorate of Adult Education, DG Health Services and Department of Women and Child Development. Their publicity campaigns were undertaken over all the other channels of All India Radio throughout the country and during special sporting events throughout the year. During the last year the Ministries and Departments that used All India Radio for the first time were National Disaster Management Division of Ministry of Home Affairs, Ministry of Company Affairs, Food & Nutrition Board (Dept. of Women & Child Development), NALSA, Central VAT, Commonwealth Human Rights initiative for Right to Information, Department of P&T and Khadi & Village Industries Commission.

With the opening of Marketing Division, All India Radio has been able to cross its targets by earning a revenue of Rs. 268.13 crore during the financial year 2005-06.

AIR RESOURCES

All India Radio and Doordarshan have a vast reserve of resources in the form of its infrastructure, human resources, technical expertise, knowledge of broadcasting and expertise in other related fields. Over the years starting with a modest beginning of 500W power Medium Wave transmitter, it has grown into a world class

broadcasting organisation. Presently the infrastructure includes land, building, tower, transmitters, studios, Satellite Earth Stations, archives facility, Staff Training Institute (Technical), Research & Development, etc. In order to tap this potential, AIR Resources as an independent centre for earning revenue from this vast hardware infrastructure, was established in May 2001 with the initiative taken by the Engineering Wing. AIR Resources aims towards becoming the premier national and global consultancy service provider of broadcasting and related services. AIR Resources is providing turnkey solutions in setting up FM transmitters, Studios, Community Radio Stations to Government and private organisations. It is also sharing its infrastructure to broadcast / communication service providers on airtime sale and rentals. "AIR Resources" under Prasar Bharati is generating revenue by undertaking ventures in the field of broadcasting, computers and communications.

(A) Projects Undertaken and Achievements :

(i) **Consultancy :** Providing turnkey solutions to IGNOU in setting up FM Transmitters for their FM Educational Channel known as **Gyan-Vani Channels** at 40 places in the country. AIR Resources is also leasing existing infrastructure viz. land, building and tower on rental basis to IGNOU at their Gyan-Vani stations.

(ii) **Operation and Maintenance :** Undertaken Operation and Maintenance of all the so far commissioned 22 IGNOU's FM Educational Channels (i.e.), **Gyan-Vani** transmitting stations).

(iii) **Studio Facilities :** Provided studio facilities to IGNOU at 4 more places viz. Jabalpur, Patna, Panaji, Ahemedabad till their Gyan-Vani Studios are commissioned.

(iv) **Sale of Air time :** Providing Airtime on AIR's 10 KW FM Transmitter to IGNOU for transmission of their Gyan-Vani Channel at Shillong.

(v) **Infrastructure Licensing / Renting :** (a) Provided Prasar Bharati's Infrastructure viz. land, building and tower on rental basis to Private FM Broadcasters during Phase-I scheme of Ministry of I&B. At four place 10 Private FM Broadcasters are sharing infrastructure of Prasar Bharati such as land and tower on license fee / rental basis. (b) Signed Agreements with all Private FM Broadcasters for sharing of AIR & DD infrastructure (land, building and towers) for creation of Common Transmission Infrastructure (CTI) facilities in the 91 cities where Phase-II Pvt. FM Broadcasters have been allocated 244 FM channels by MIB. (c) Signed Agreements with 5 Private FM Broadcasters for sharing of AIR & DD infrastructure (land, building and towers) in the 5 cities (Hyderabad, Chennai, Bangalore, Delhi, Jaipur) for setting up their interim setups. (d) Provided Prasar Bharati's infrastructure viz. land, building and tower on rental basis to various mobile operators for sharing towers and land of AIR / DD at various places for installing their GSM / CDMA / WLL antenna on FM / TV / STL towers and BTS equipment for their mobile service operations. During the year AIR Resources have shared towers at 23 places with three service providers.

(vi) Signed an agreement with Government-owned Telecom Services Provider M / s BSNL for revenue sharing for Phone-in-Programme on FM Network in 16 cities.

(B) The overall revenue of AIR in the current financial year (2006-07) in Oct 2006 is Rs. 153.67 crore (approx.) which indicates on encourging trends.

PUBLIC SERVICE BROADCAST

The commitment of All India Radio to the rural audience dates back to more than 50 years. All stations of All India Radio broadcast Farm & Home programmes

directed at rural audience. In fact, special programmes have been designed to cater to the day-to-day seasonal needs of the farming community. To broadcast the latest technology and information for agricultural output is a continuous process of Farm & Home programme. These programmes not only provide information on agriculture but also create awareness about the ways and means to improve the quality of farmers lives. The programmes are broadcast daily in the morning, noon and evening. The average duration of Farm & Home broadcasts is 60 to 100 minutes per day. Farm & Home programmes also include programmes for Rural Women, Rural Children and Rural Youth.

AIR has stepped up its activity of Agriculture Broadcast with the launch of exclusive Agriculture Channel 'Kisan Vani' from 15 February 2004 in collaboration with the Ministry of Agriculture to inform local farmers the daily market rates, weather report and day to day activities in their area at micro level. Presently 'Kisan Vani' is being broadcast from 96 AIR Stations.

There is a regular broadcast of programmes related to Environment and Forest Development Schemes launched by the Central / State Governments. All India Radio has adopted a multilingual approach for its broadcasts of programmes on environment, forestry, wildlife and ecology, etc. These programmes are broadcast in major languages and local dialects, spoken by various smaller communities.

The Hon'ble Supreme Court passed directions in the year 1991 for the propagation of environment awareness in the country. The government assured the Hon'ble Court that a daily programme on environment will be mounted for 5 to 7 minutes besides a weekly programme of longer duration. The heads of AIR Stations were accordingly instructed to plan, produce and broadcast the programmes for creating environmental consciousness among the people of the area.

Family Welfare units and other AIR Stations broadcast programmes on Health and Family Welfare in general as well as special audience programmes like rural, women / children and general audience programmes, etc., in various formats like talk, discussions, features, quiz, jingles, spots, short stories, drama, success-stories, phone-in programmes, etc. Apart from this, rest of AIR Stations, including local Radio Stations are also mounting programmes on their theme regularly. The themes covered are raising the marriage age, delaying the first child, space between two children, terminal methods, maternal care, child survival, women empowerment, promotion of intro-personal communication / male responsibility, neutralising male preference syndrome, medical, termination of pregnancy, promotion of institutional legal provisions, management of reproductive tract infections (RTIs) and sexually transmitted infections (STIs), pre-natal diagnostic techniques (Regulation and Prevention of Misuse) Act - 1994, HIV / AIDS, drug, breast feeding, child rights, child labour, girl child, disability, T.B., Leprosy and reproductive child health, etc.

AIR Stations broadcast programmes for rural women as well as urban women at the timing convenient for listening by the respective target groups. The programme directed to women listeners cover subjects related to socio-economic development of women, health and family welfare, food and nutrition, scientific home management, women entrepreneurship, education, including adult education, gender issues. These programmes also aim at creating wide social awareness about rights and privileges of women through the propagation of legal literacy. Special programmes as well as general audience programmes are being broadcast focussing on the issue to change social attitudes and behavioral practices towards women.

NATIONAL RURAL HEALTH MISSION (NRHM)

Recognising the importance of health in the process of economic and social development and improving the quality of life of our citizens, the Government of India has resolved to launch the National Rural Health Mission to carry out necessary architectural correction in the basic health care delivery system.

The goal of the Mission is to improve the availability of and access to quality health care by people, especially those residing in rural areas; the poor, women and children.

The National Rural Health Mission (2005-12) seeks to provide effective healthcare to rural population throughout the country with special focus on 18 states, which have weak public health indicators and / or weak infrastructure.

These 18 States are Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Manipur, Mizoram, Meghalaya, Madhya Pradesh, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Uttaranchal and Uttar Pradesh.

A workshop with the officials of the Ministry of Health and Family Welfare and Programme Producers from 18 Capital Stations of All India Radio was held on 29 August 2005 at Ranchi, and it was decided to mount special programmes, disseminating all related aspects of NRHM on weekly basis. Thus, a 15-minute capsule is produced and broadcast from 2nd week of September 2005 from the 18 Capital Stations and relayed on terrestrial Network.

INTERNATIONAL RELATIONS UNIT

International Relations Unit of DG; AIR remained quite active during the year 2006-2007 carrying out various international activities and commitments concerning broadcasting.

A number of deputations were coordinated during the year by the Unit for AIR officials and conferences / workshops / seminars had participation of All India Radio's officials as mentioned in the following table :

IR section coordinated successful conduct of the 5th SAARC Radio Quiz 2005 on 7 October 2005. For the first time the event was organised and conducted through teleconferencing in which two students each from SAARC Member countries participated. Bhutan got the First Prize while India remained runners - up in the event.

All India Radio participate actively in all the SAARC activities related to broadcasting. Every month a SAARC Audio Visual Exchange programme of a member country is broadcast over AIR. A special SAARC News bulletin is also broadcast on every Sunday.

All India Radio maintained good relations with other organisations. Besides participating in the Radio Management Courses of Deutsche Welle Radio Germany's Radio Training Centre, at Bonn, AIR also participated in the two joint radio productions with DW produced in India : one on the "Educational Opportunities in Globalisation'' and the second one on the Rebuilding after one year of Tsunami".

Under the Cultural Exchange Programme (CEP) Agreements were signed between Government of India and different countries and the IR Unit coordinates the exchange of radio programmes with different countries. There are 21 countries with whom Government of India has the ongoing CEP Agreements concerning Radio

broadcasting. Under the CEP, AIR hosted an official three-member delegation from Myanmar Radio and Television who came to Delhi on a weeklong study tour. Two delegations from Deustche Welle Radio, Germany and one high-level Government delegation of China also visited AIR with the aim to explore avenues for better coordination and cooperation between their respective National Radio Organisations.

All India Radio has also been actively participating in International Awards competitions being held every year and bringing laurels to its credit. The activity is coordinated by IR Unit. AIR had sent entries for the Premois Ondas 2005, Barcelona; AIBD Awards, Kualalumpur; CBA Awards, London; ABU Prizes; Kualalumpur and International Grand Prix, France. AIR's entry won first prize in the International Section of the 6th International Radio Festival organised by Islamic Republic of Iran Broadcasting. AIR's programme in Oriya language 'Uthare Papuni' (Wake up Papuni, Wake Up) produced by Shri Ramapada Nanda, Station Director, All India Radio, Jeypore (Orissa) in the category of 'Environment: the Earth My Loving Planet' got this award which involved a trophy and a sum of US $ 1000 cash.

AIR's two entries that were sent for ABU Prizes 2005 reached the final alongwith the four best entries selected for the Prize. AIR's entry 'I won't Die in Death' produced by AIR Thiruvananthapuram got a special recognition at the ABU General Assembly held at Hanoi, Vietnam for being specially short listed for ABU Prize Workshop. The Producer of the programme Mr. Biju Mathew participated in the workshop.

AIR joined hands with UNICEF in disseminating the important social messages on Health, Nutrition, Sanitation, Water, Girl Education, Child Rights, Registration of Birth, Eradication of Polio, Breast-feeding, HIV / AIDS and consumption of iodised salt. UNICEF conducted two workshops at Nagpur and Latur in which Programme Executives from identified districts participated. The objective of the workshop was to focus radio programming which could lead to behaviour change in the people for their betterment.

All India Radio also participated in Thomson Foundation's EU India Project on HIV / AIDS. Programme Executives from different AIR stations attended a training workshop in this respect at Gangtok in October 2005.

All India Radio hosted the Commonwealth Broadcasting Association's 26th General Conference in New Delhi from 15-18 February 2006. Over 250 delegates representing over 100 member Commonwealth Countries participated in the conference. IR Unit was the nodal centre for all the local planning and arrangements for prestigious global media event turned out to be a great success.

All India Radio is also helping Afghan Radio and Television (ART) in their reconstruction process by way of offering training opportunities for their personnel and providing music instruments and music records. A team of technical experts is also likely to visit Kabul soon to find appropriate solutions for upgradation of their FM radio networks.

DIGITALISATION OF AIR ARCHIVE

A special project was launched to digitalise all archival recordings in 2001. In a time-bound programme, the project has been completed by 2005. Akashvani has now become one of the major digital libraries in the broadcasting network with

modern tape numbering system in tune with the internationally accepted norms. Programmes transferred into digital medium are approximately 15,900 hours.

Releases from AIR Archive "Akashvani Sangeet" : AIR Archive has started releasing from its precious music collections under the banner ''Akashvani Sangeet". So far the Archive has released Dr. M.S. Subbulakshmi, Alathur Brothers, Ariyakkudi Ramanuja Iyengar, Pt. Krishnarao Shankar Pandit, Pt. Kumar Gandharv, Ustad Ameer Khan, T. Brinda T. Mukta, T.N. Rajaratanam Pillai. Pt. Nikhil Banerjee, Ustad Allauddin Khan. T. Chowdaiah, Dagar Brothers (Sr.), Pankaj Kumar Mullick, Debabrat Biswas and Rajeshwari Datta and Rajasthani Folk Songs. Apart from it, South Archive has also released more than 25 albums of items of regional values.

R&D Activities : The Research Department of All India Radio and Doordarshan is engaged in Research & Development work incorporating state-of-the-art technology in Radio and Television Broadcasting. The technical activities undertaken in various labs are as follows :

i) Data Radio Channel (DARC) System : DARC - Data Radio Channel is a broadcasting system based on the already existing FM infrastructure. It allows information providers to transmit data (text, picture or video) to any place within the coverage of the FM radio network. Software has been developed for communication with electronic LED Billboard via DARC for "text only" billboard.

Electronic bill boards make use of the new true colour, ultra bright LED technology for attractive display of any TV commercial, live events including breaking news instantly from remote location when operated in conjunction with DARC. Software for the purpose has been developed in-house in Visual Basic which is used at the transmitting end for sending text messages, bitmaps and icons to be displayed on electronic LED Billboard. The data transmission from AIR FM Gold 106.4 MHz has been going on continuously for one year. The data signal received on billboard has been tested for satisfactory reception up to 55 km. The system was displayed in Cable & Broadcast (I), IETE, and BES (I) Exhibitions. A separate module for picture transmission has been added at the transmitting end.

(ii) Six Channel Phone-in-Conference system : The Six Channel Phone-in-Conference system was developed with modification of the existing Phone-in-Console as per requirement of Programme producer particularly for live interactive programmes e.g. Quiz, discussion, chat show, Radio Bridge, live conference with eminent personalities, etc. This Conference system was made user-friendly with minimum operations. In the system, two numbers of interface units were fixed in each Phone-in-Console. By arranging such Phone-in-Console units in tandem, six channel PSTN conferences system was realised. A large number of such Phone-in-Console units can be added by increasing the number of PSTN Channels, Testing and Demonstration were done in the Studios of B.H.A.I.R. New Delhi.

(iii) News Room Automation System for All India Radio : The News Room Automation software developed in R&D integrates four stages of News Broadcasting viz. gathering news items from agencies on computer, editing, reading news and archiving thereof. A number of features have been added and modified to suit the needs of Regional Newsroom which give news bulletins in regional languages and dialects for the listeners in specific areas. Recently added features include a Rehearsal Button provided on Teleprompter Screen to facilitate the News Reader to rehearse in advance. Provision has been made to expand the width of teleprompter screen

and change the size of fonts. The pilot setup has been installed at RNU of AIR Guwahati, Shillong, Shimla, Jaipur, Lucknow, Chennai and Mumbai.

(iv) Percentage Modulation Monitor (AM) : A PC based Percentage Modulation monitor system has been developed. The system consists of a PC with application software, commercial receiver, PPM card and Data Acquisition card. Field trial has been carried out with Nangli Delhi-B transmitter and measurements were taken in laboratory. Provision has been made in the software to show peak and average modulation graphically. Since a high modulation percentage ensures a healthy and clean signal for the listeners. This equipment will go a long way in providing excellent signal quality.

(v) Remote monitoring of status of Very Low Power TV Transmitters : Doordarshan has a large number of Very Low Power (below 100 Watts) TV Transmitters (VLPTs), installed all over India at remote, isolated and difficult areas. There is no way to monitor the status of the transmitters at DD Monitoring Centre which is normally at a distant place from VLPT site.

A Remote Monitoring system to monitor the status of the VLPT has been developed. The system will be installed at a large number of VLPT centres under different Maintenance Centres in the near future.

(vi) High Power FM Antenna : High Power FM Antennas are very costly and at present being imported in India. As a modest attempt towards import sustitution a single bay 3 kW FM antenna was designed and fabricated by Research Department. The field trials of single bay 3 kW FM antenna have been successfully carried out at AIR, Kurukshetra and Pune. Based on these trials, a six bay 10 kW FM antenna has been designed, fabricated and is ready for field trials.

(vii) Interactive Radio Service (IRS) : Research Department has already developed Low Cost computer based audio play back system called IRS to provide more and more live interactivity in the listener's part to enable the presenter to talk to the listener and to play the song of his interest. This system is getting popular day by day. Till today 27 AIR stations of our country are using this system. Efforts are going on to implement the same at remaining AIR stations preferably FM stations where interactivity is getting more popular these day. Further improvements are in progress to provide better interactivity in the said software to the network.

(viii) Acoustics : The Acoustic Laboratory of Research Department is already involved in carrying out various measurements, testing and evaluation of acoustic material and electroacoustic transducers like microphone and loudspeakers, etc., based on Indian as well as international standards. To assess the technical suitability of new acoustic material of different types - insulating, absorbing, synthetic carpets, etc., exclusive projects are taken to carry out test and evaluation including performance assessment of new & old studios in the AIR and Doordarshan Network.

To cope with the emerging technologies in the field of acoustic test and evaluation lab has been upgraded by installing NOR 121 system of M/s Norsonic, Norway which is totally FFT based digital technology replacing all earlier manual procedures. It can measure reverberation time, sound insulation, ambient noise level, etc., at laboratory as well as on-site.

The lab is also involved in assisting various clients of acoustic field by providing them with latest testing facilities in development of new acoustic material. The assessment of the characteristics of new acoustic material (i.e., NRC, STC, etc.)

produced by them is facilitated on no profit no loss basis by charging a small amount of Rs 5000 per test.

DOORDARSHAN

Doordarshan, a Public Service Broadcaster, is among the largest terrestrial television network in the world. The service was started in New Delhi on 15 September 1959 to transmit educational and development programmes on an experimental basis with half-an-hour programming.

Commencement of regular television service as part of All India Radio commenced in Delhi (1965); Mumbai (1972); Kolkata (1975), Chennai (1975).

Doordarshan was established on 15 September 1976. A major landmark thereafter was the introduction of colour television in 1982 coinciding with the 9th Asian Games held in New Delhi that ushered in a major revolution in broadcasting in the country. This was followed by a phase of rapid expansion of Doordarshan when, in 1984 more or less every day saw the installation of a transmitter in the country.

Other significant milestones that followed thereafter were :

- Launch of second channel
- Delhi (9 August 1984), Mumbai (1 May 1985), Chennai (19 November 1987), Kolkata (1 July 1988)
- Networking of second channels to launch the Metro Channel (26 January 1993)
- Launch of International channel DD India (14 March 1995)
- Formation of Prasar Bharati (Broadcasting Corporation of India) (23 November 1997)
- Launch of sports channel DD Sports (18 March 1999)
- Launch of enrichment / cultural channel DD Bharati (26 January 2002)
- Launch of 24 hours news channel DD News (3 November 2002)
- Launch of free to air Direct-to-Home Service DD Direct + (16 December 2004)

Doordarshan has contributed significantly towards the acceleration of socio-economic change, promotion of national integration and stimulation of scientific temper in the country. Being a Public Service Broadcaster, its mandate is to carry through its programmes messages on population control and family welfare, preservation of environment and ecological balance, highlighting the need for social welfare measures for women, children and the less privileged. It is also mandated to promote games and sports, and the artistic and cultural heritage of the country.

DOORDARSHAN TODAY

Doordarshan network consists of 64 Doordarshan Kendras / Production Centres, 24 Regional News Units, 126 Doordarshan Maintenance Centres, 202 High Power transmitters, 828 Low Power Transmitters, 351 Low Power Transmitters, 18 Transposers, 30 Channels and DTH Service and has a sanctioned strength of 21708 officers and staff of various categories.

DD's Transmitters

Channel	HPT	LPT	VLPT	transposer	Total
National (DD1)	128	747	346	18	1239
DD News	70	81	5	-	156

Others	4	-	-	-	4
Total	202	828	351	18	1399

DOORDARSHAN CHANNEL

(iii) **National Channel (5) :** DD1, DD News, DD Bharati, DD Sports and DD Urdu. **Regional Language Satellite Channel (11) :** DD North-East, DD Bengali, DD Gujarati, DD Kannada, DD Kashir, Dd Malayalam, Dd Sahyadri, DD Oriya, DD Punjabi, DD Podhigai, and DD Saptagiri. **Regional State Network (11) :** Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Uttar Pradesh, Haryana, Uttrakhand, Himachal Pradesh, Rajasthan, Mizoram and Tripura. **International Channel (1) :** DD India.

(iv) 126 Doordarshan Maintenance Centres.

(v) 24 Regional News Units.

Doordarshan has a three-tier programme service - National, Regional and Local.

- The emphasis in the programmes in the National service is on events and issues of interest to the entire nation.
- The programmes in the regional service focus on events and issues of interest to the people of that particular State.
- The local service caters to the needs of the populace living in the areas falling within the reach of a particular transmitter through area specific programmes in the local languages and dialects.

In addition, the programmes in the national and regional services are also available in satellite mode to the viewers all over the country.

Programme sourcing : Programmes for different channels of Doordarshan are sourced from :

• **In-house production**

Programmes produced by Doordarshan professionals utilising Doordarshan infrastructure, including coverage of events 'live' by Doordarshan.

• **Commissioned programmes**

Programmes produced by persons of proven merit with funds provided by Doordarshan.

• **Sponsored programmes**

Privately produced programmes telecast by Doordarshan on payment of a fee in exchange for Free Commercial Time.

• **Royalty programmes**

Programmes acquired by Doordarshan from outside producers on payment of royalty for single or multiple telecasts.

• **Acquired Programmes**

Programmes/events acquired from foreign companies on payment of rights fee.

• **Educational/Development programmes**

Educational and Development programmes produced by different agencies of the Government.

• **Self Financed Commissioning**

The initial production cost of these programmes is met by the private producer. Doordarshan reimburses the production cost to the producer after commencement of telecast. The programme is marketed by Doordarshan. The scheme also has provisions for payment of bonus on approved production cost on attainment of high TRPs, and for reduction of production cost in case of poor performance of programme.

Terrestrial Coverage of Doordarshan : The coverage of the two terrestrial channels of Doordarshan is shown below :

Channel	Coverage (%) National average (As on 30.6.2006)	
	By Area	By Population
DDI	79.4	9.4
DD News	24.4	48.5

DD Direct + : Doordarshan's free-to-air Direct-to-Home service DD Direct + was launched by the Prime Minister on 16 December 2004. Starting with 33 TV channels (Doordarshan / Private) and 12 Radio (AIR) channels, the capacity of the service was increased 36 TV channels and 20 Radio channels. The signal of this service can be received all over India , except A&N Islands, with the help of a receiver system. The subscriber base of this service is in excess of 5 million.

DD-NATIONAL CHANNEL

DD-I CHANNEL (NATIONAL)

Doordarshan DD-I Channel continues to make significant contributions to accelerate socio-economic changes, promote national integration, stimulate scientific temperament, disseminate knowledge, educational programmes, public awareness, means of population control, messages on family welfare, preservation of environment and ecological balance, measures for women welfare, children and under-privileged, etc. It also promoted sports, and artistic and cultural heritage of the country.

Apart from Public Service Broadcasts, it also telecasts entertainment programmes, including serials on different subjects of social relevance as sponsored / commissioned / Self Financed Commissioned programmes, films, etc.

The service of National Channel is available in terrestrial mode as well as satellite mode from 5.30 AM to 00.00 (mid-night) and thereafter in satellite mode till next morning up to 5.30 AM.

Regional Language Satellite Service : The eleven regional Language Satellite Services are :

DD-Malayalam	DD-Saptagiri (Telugu)
DD-Bengali	DD-Chandana (Kannada)
DD-Oriya	DD-Sahyadri (Marathi)
DD-Gujarati	DD-Kashir (Kashmiri)

DD-Punjabi	DD-North-East
DD-Podhigai (Tamil)	

The Regional Language Satellite Services and Regional State Networks broadcast a wide spectrum of programmes covering developmental news, serials, documentaries, news and current affairs programmes to communicate with the people in their own language. General infotainment programmes, social programmes and film programmes as other major genres are also telecast.

Regional State Network : The Regional State networks cater to the people living in Hindi Belt comprising U.P., Bihar, Jharkhand, Chhattisgarh, M.P. Rajasthan, Haryana and H.P. The programmes of this service are produced and broadcast from the capital Kendras of the respective states between 3.00 and 8.00 pm and are relayed by all the ground transmitters of the state.

DD-News : The DD-News channel the country's only 24 hours terrestrial news channel telecasts over 16 hours of live news bulletins daily in Hindi and English. News Headlines, News updates, breaking news on the scroller are regular features on this channel. A daily bulletin in Sanskrit and Urdu is also telecast. Besides, the Regional News Units attached to different Doordarshan Kendras also telecast daily news bulletins in regional languages of varying duration and frequency. The DD News headlines can now be accessed through the SMS.

DD News also carries Stock and Commodities indices throughout the day in an automated delivery mode, accessing information from NSE & BSE and leading commodity exchanges like NCDEX, MCX, etc.

DD Sports : DD Sports remains the country's only free-to-air sports channel. It continues to provide coverage to international and domestic games, including cricket, football, hockey, tennis, kabaddi, Archery, Athletics and other indigenous games, etc.

A cash outflow system was introduced to cover non-Olympic and traditional sports on DD Sports. The channel continued to cover sporting events organised by the different Sports Federations and Association.

DD Bharati : DD-Bharati Channel was launched on 26 January 2002. Besides programmes on adventure, quiz contests, fine arts / paintings, crafts and designs, cartoons, talent hunts, etc., it also telecasts "MERI BAAT" an hour-long phone-in 'live' show with young people.

Programmes emphasising on a healthy life style and focusing on prevention rather than cure, both in our traditional and modern forms of medicine are also being telecast.

Classical dance / music performances by top class artists of national and international fame are also featured on this channel are programmes on theatre, literature, music, paintings, sculpture and architecture.

The channel also telecast programmes in collaboration with organisations like IGNCA, CEC, IGNOU, PSBT, NCERT and Sahitya Akademi. The channel also provides extensive coverage to the AIR sangeet sammelans. Contributions made by the Regional Doordarshan Kendra's are regularly telecast live / recorded.

DD India : The programming on this channel continues to be done in a manner to enable it to meet its primary objective of providing a window to the world especially for the Indian diaspore to witness the Indian social, cultural, political and economic

scene. The Channel continues to carry news bulletins in Hindi, English, Urdu, Sanskrit, Gujarati, Malayalam and Telugu, features on topical events and discussions on issues of international significance. It also beams many entertainment programmes, serials, theatre, music and dance besides feature films.

Programmes in regional languages such as Punjabi, Urdu, Telugu, Tamil, Bengali, Kannada, Malayalam, Gujarati and Marathi form an essential ingredient of this channel. Live Coverage of national events like Independence Day, Republic Day Celebrations, the Budget presentation and other happenings of national and international importance are regularly carried on this channel.

PRESS AND PRINT MEDIA

REGISTRAR OF NEWSPAPERS FOR INDIA

The Office of the Registrar of Newspapers for India (RNI) came into existence on 1 July 1956, on the recommendation of the First Press Commission in 1953 and by amending the Press and Registration of Books Act, 1867. The Registrar of Newspapers for India, commonly known as the Press Registrar, is required, inter alia to submit an Annual Report to the Government by 31 December every year on the status of newspapers. The period for which the annual statements were to be furnished, was changed from the calendar to financial year in 2002. Earlier the Annual Report was compiled on financial year basis. [The total number of registered Newspapers / Periodical was 65,032 as on 31 March 2007. These were 7,131 dailies, 374 tri / bi-weeklies, 22,116 weeklies, 8,547 fortnightlies, 19,456 monthlies 4,470 quarterlies 605 annuals, and 2,333 of the other periodicity. (The figures have been updated only for the registered newspapers for the year 2006-07)].

According to the report submitted by the Press Registrar for the year 2005-06, Newspapers were registered in 123 languages and dialects. Apart from English and 22 other principal languages listed in the Eighth Schedule of the Constitution, newspapers were registered in 100 other languages and dialects mostly Indian but also in a few foreign languages too. Orissa had the distinction of publishing newspapers in 18 out of 23 principle languages. Maharashtra came next with publication in 17 languages followed by Delhi with publications in 16 principle languages.

Of the 62,483 newspapers registered as on 31 March 2006, only 8,512 submitted Annual Statements during 2005-06. The total circulation of these 8,512 newspapers was 18,07,38,611. The largest number of newspapers and periodicals registered in any Indian language is in Hindi (24,927). The second largest number of newspapers and periodicals registered in any language is in English (9,064). The state with the largest number of registered newspapers is Uttar Pradesh (9,885). The state with the second largest number of registered newspapers is Delhi (8,545).

PRESS INFORMATION BUREAU

The Press Information Bureau (PIB) is the nodal agency of the Central Government to disseminate information to the print and electronic media on government policies, programme initiatives and achievements. The Bureau disseminates information through Press Releases, Press Notes, Feature Articles, Backgrounders, Press Briefings, Photographs, Press Conferences, Interviews, Database available on Bureau's website, Press tours, etc.

At its headquarters, the Bureau functions through its corps of Departmental

No.	Dailies	Tri/Biweeklies	Weeklies	Fortnightlies	Monthlies	Quarterlies	Annuals	Others	Total
Total Nos. of Reg. News Papers as on 31st March, 2006	6830	368	21452	8224	18498	4336	579	2226	62483
Total Nos. of Reg. News Papers from 1.04.2006 to 31.03.2007	331	6	664	323	958	134	26	107	2549
Total Nos. of Reg. News Papers as on 31st March, 2006	7131	374	22116	8547	19456	4470	605	2333	65032

Publicity Officers attached to various Ministry and important government organisations. Acting as interface between media and the government, these officers also advise Ministries on media matters. Special feedback digests are prepared analysing countrywide coverage of major happenings and decisions. With 8 regional offices, 34 Branch offices and Information Centres. PIB is serving public directly through information material released from Delhi and other offices almost simultaneously, using internet and intranet.

The Regional and Branch offices act as nodal information offices for all offices of the Union government in their area and coordinate information and publicity activities for them. The field offices are being constantly strengthened with technological and other resources. Eight offices have been provided digital video cameras to generate local audio-visual and digital matter for use by print as well as electronic media.

Use of information technology has been stepped up for fast information dissemination. Also to constantly improve upon the design of PIB website, pib.nic.in. and introduce more user-friendly elements in it, a Web Administration Cell was created at Delhi. All information released by the Bureau is put on the internet instantly. This, along with reasonably high quality photographs are provided on the website for free download.

PIB's main website, pib.nic.in, posts information in English, Hindi and Urdu. Besides, all field offices are in the process of launching sister websites which will provide information in respective regional languages. The Chennai and Aizawl offices have already launched their own sites in Tamil and Mizo respectively.

PIB has also launched intra-PIB, internet on a highly interactive platform, for better communication with field offices and to serve as a tool for professional activities. All the regional branch offices were given user accounts in the site http:intrapib.nic.in

As part of the Special services, the Feedback Cell in the PIB prepares a daily digest and special digests based on news stories editorials from national as well as regional dailies and periodicals. The feedback is received regularly from the Regional and Branch offices. The Feature Unit of the Special Services of the Bureau provides backgrounders, updates, features and graphics. These are circulated in the national network and also sent to the Regional and Branch offices for translation and circulation to the local press. In addition, the Regional and Branch offices also issue originating feature articles. Under the e-Clipping Project, about 5,55,000 clippings on important issues and events are digitized in the Asset Management Programme CUMULUS. The Press Clippings Unit is catering to the requirements of various Ministries. A centralised press clipping service has been started which enables cataloging of the clippings with key words search mechanism.

Issue of handouts in various formats, features and photographs to the press is one major activity of PIB. The information material is released in English, Hindi, Urdu and 13 other languages to about 8,400 newspapers and media organisations. The Bureau issued 1,31,777 press releases and 10,046 features upto June 2007. As many as 1053 press conferences were organised. Over one lakh photo prints were distributed to the Press. About 8000 subscribers to PIB's e-mail service received the information material through automated e-mails.

PIB provides accreditation to Media representatives including foreign media at Delhi. This facilitates them to have an easy access to information from the Government sources. Apart from regular accreditation, PIB also grants temporary accreditation to foreign media persons who visit India for a short period.

NEWS AGENCIES

PRESS TRUST OF INDIA

India's largest news agency, Press Trust of India (PTI) is a non-profit sharing cooperative owned by the country's newspapers with a mandate to provide efficient and unbiased news to all subscribers. Founded on 27 August 1947, PTI began functioning from 1 February 1949.

The PTI offers its news services in English and Hindi languages. Bhasha is the Hindi language news service of the agency. PTI subscribers include 500 newspapers in India and scores abroad. All major TV / radio channels in India and several abroad, including BBC in London, receive PTI service.

The PTI now has its own satellite delivery system through a transponder on an INSAT satellite for reaching its services directly to subscribers anywhere in the country. Increasingly more and more subscribers are opting for satellite reception. Photo service is delivered by satellite as well as accessed by dial-up. PTI has also now begun satellite transmission by Ku band wich offers subscribes the option of receiving news through a cheaper and small size satellite receiver.

PTI is on the Internet too. The agency's news services have been showcased on its website http. / / www.ptinews.com. Clients also have the option of taking any of PTI's services through Internet. PTI news is also available through World Space radio broadcast reception.

The Photo service is delivered by satellite as well as accessed through dial-up. The agency is now engaged in archiving its photos. Once launched the on-line photo archives will help access photos from the agency's old files dating from 1986 when the Photo service was launched.

With a staff of about 1300 including 350 journalists, PTI has 80 bureaux across the country and foreign correspondents in major cities of the world including Beijing, Colombo, Dhaka, Dubai, Islamabad, Kathmandu, Kuala lumpur, London, Moscow, New York and Washington. In addition, about 350 stringers contribute to the newsfile at home while 20 PTCs bring news from rest of the world. The agency has also a networks of photo stringers across the country numbering about 200.

Besides the news and photo services, the other services of the agency include mailer packages of Feature, Science service, Economic service and Data India, and screen-based services as News-scan and stockscan. A television wing, PTI-TV, does features and undertakes corporate documentaries on assignment basis.

The PTI has arrangements with the Associated Press (AP) and agency France Presse (AFP) for distribution of their news in India. AP's photo and international commercial information are also distributed in the country through PTI.

The PTI is a partner in Asia Pulse International, a Singapore-registered company, formed by PTI and five other Asian media organisations to provide an on-line data bank on economic developments and business opportunities in Asian countries. PTI is also a participant in Asianet, a cooperative arrangement among

12 news agencies of the Asia-Pacific region, for distribution of corporate and government press releases.

The PTI is a leading participant in the NAM News Network, the Internet-based news exchange arrangement of the Non-Aligned Countries, and the Organisation of Asia-Pacific News Agencies. It also has bilateral news exchange arrangements with several news agencies belonging to the countries of Asia, Africa, Europe and Latin America.

UNITED NEWS OF INDIA

United News of India (UNI) was incorporated under the Companies Act, 1956 on 19 December 1959 and started functioning effective 21 March 1961.

In the past four decades, UNI has grown into a major news organisation in India and, with its vibrant presence, provided the much-needed spirit of competition in the vital areas of news gathering and dissemination.

UNI's innovative spirit was evident when it became the first news agency in India to launch a full-fledged Hindi wire service 'UNIVARTA' in 1982 and a Photo Service and a Graphics Service in the same decade. In the early 90s, it launched the first-ever wire service in URDU.

UNI today has about 719 subscribers. It also has 71 offices in India and an employee strength of more than 975 persons, including 391 journalists. Apart from its own correspondents in all major cities of the country, it also has about 305 stringers who report from all the important towns. This countrywide network has enabled UNI to provide coverage of events from all the regions of the country.

Further, UNI has Correspondents in Washington, New York, London, Moscow, Dubai, Islamabad, Kathmandu, Colombo, Dhaka, Singapore, Toronto (Canada), Sydney (Australia), Bangkok (Thailand) and Kabul (Afghanistan).

UNI distributes world news from Reuters, the world's largest information company. Besides, it has news exchange arrangements with Xinhua of China, RIA Novosti of Russia, UNB of Bangladesh, Anadolu of Turkey, WAM of the United Arab Emirates, GNA of Bahrain, KUNA of Kuwait, ONA of Oman and QNA of Qatar and CNA of Taiwan.

UNI's Photo Service distributes about 200 pictures every day, including sixty international photographs from EPA, the European Pressphoto Agency and Reuters. Its Graphics Service distributes five or six graphics every day. UNI today has a countrywide network of 27 photographers and an equal number of photo stringers who contribute round-the-clock for UNI's daily photo report of about 200 pictures.

In the 46-odd years of its existence, UNI has acquired an enviable reputation for its fast and accurate coverage of news events.

UNI has always been in the vanguard in adapting modern technology to suit its requirements in news gathering and dissemination. As part of its modernisation drive, UNI has computerised nearly all its offices in India. It was a quantum jump for UNI when it upgraded its nationwide teleprinter network, extending to over 10,00,000 km. From 50 baud to 300 baud Data circuits. This again was a temporary changeover as UNI further advanced to 1,200 baud speed Data Circuits and then to the state-of-the-art satellite technology for its nationwide distribution of news at a speed of 56 kbps. Switching over to VSAT technology has meant that all our subscribers across the country would get our stories simultaneously without any

loss of time. Further, we would also be able to deliver our pictures through this system.

UNI is already the first Indian news agency to deliver its entire news services in English and Hindi as well as its Photo Service through the Internet. Subscribers can download the stories and pictures from the UNI and UNIVARTA websites. The respective addresses of UNI and UNIVARTA websites are: UNI : www.uniindia.com and UNIVARTA : www.univarta.com

NAM NEWS NETWORK

NAM News Network (NNN) is the new Internet-based news and photo exchange arrangement of the news agencies belonging to member countries of the non-aligned movement. News and photo contributions of NAM news agencies including Press Trust of India are uploaded onto the NNN website http://www.namnewsnetwork.org for on-line access by all. Malaysian news agency Bernama is at present handling the operation of the website from Kuala Lumpur.

Operational from April 2006, NNN was formally launched by the Malaysian Information Minister Mr Zainuddin Maidin in Kuala Lumpur on 27 June 2006. NNN replaces the Non-aligned News Agencies Pool (NANAP) which had acted as the news exchange mechanism among non-aligned countries for the last 30 years. With internet a cheap and reliable mode of communication, NNN is expected to contribute to sustained flow of information in the 116 member non-aligned world.

The decision to replace NANAP with NNN was taken at the Sixth Conference of Ministers of Information of Non-Aligned Countries (COMINAC VI) held in Kuala Lumpur in November 2005. The meeting felt that NANAP had lost its momentum due to declining support from member countries and that it "should be revitalised through a new workable mechanism, if necessary in a new form, to move forward." The meeting endorsed a Malaysian proposal for NANAP's replacement by the Internet-based NNN.

NANAP, set up in 1976, was the first attempt of the non-aligned movement to provide for exchange of news among its member countries. During its 30 years of operation, it played a significant role in improving the flow of communication in the non-aligned world. At a time when communication costs were very high, NANAP provided for sharing of communication channels of member news agencies to ensure a common network for exchange of news among all countries of the non-aligned movement. News was exchanged under the arrangement in four international languages - English, French, Spanish and Arabic.

PRESS COUNCIL OF INDIA

Press Council is a statutory quasi-judicial authority mandated by the Parliament to preserve the freedom of the press and maintain and improve the standards of newspapers and the news agencies in India. It is an autonomous body with equal quasi-judicial authority over the authorities and the press persons. For the discharge of the above objects, the Council comprises a Chairman and 28 members. While the Chairman handed convention been a sitting or retired judge of the Supreme Court of India, of the 28 members, 20 represent various segments of the Press and eight (8), overseeing the readers' interests are representatives of the two Houses of Parliament and premier literary and legal bodies of the country i.e. University Grants Commission, Bar Council of India and Sahitya Academy. The council has its own

funds for performance of its functions under Act that comprises the fee collected by it from newspapers and other receipts and grants from the Central Government. The Council is presently chaired by Hon'ble Mr. Justice GN Ray.

The Council discharges its functions primarily through adjudications on complaint cases received by it either against the Press for violation of journalistic ethics or by the Press for interference with its freedom. Where the Council is satisfied, after inquiry, that a newspaper or a news agency has offended against the standards of journalistic ethics or public taste or that an editor or working journalist has committed any professional misconduct, the Council may warn, admonish or censure them or disapprove of their conduct. The Council is also empowered to make such observations as it may think fir it respect of the conduct of any authority, including Government, for interfering with the freedom of the press. The decisions of the Council are final and cannot be questioned in any court of law.

During the year under review, i.e. 2006-2007 a total of 755 complaints were instituted in the Council. Of these 200 complaints were by the Press against authorities of the Government for violation of press freedom and 55 complaints were directed against the press for breach of journalistic ethics. With 760 matters pending from the last year, there were a total of 1515 matters for disposal by the Council. Of these 850 matters were disposed of during the year, either by way of adjudication or though summary disposal by the Chairman on account of settlement by the mediation of the Chairman or due to lack of sufficient grounds for holding inquiries or non-prosecution, (withdrawal) or on account of matters having become sub-judice. In all 665 matters were being processed at the close of the year including 37 matters pending before the Inquiry Committee.

The Council took sue motu cognizance of threats to press freedom in four cases, the last being the threat to the media in the northeast by ULFA. In the course of these adjudications, the Council has developed several guiding principles towards building up the code of conduct for the media. Similar guiding principles have been drawn for the benefit of the authorities dealing with the press. In its efforts to take justice to the doorstep, the Council held its sittings at Hyderabad, Lucknow, Bhubaneswar and Udaipur during the year where the hearing into the cases of the region saved the litigants the travel to Delhi to mitigate their grievance.

As a part of its mandate to preserve the standards of the press, the Council drew up during the year, medal press accreditation rules that have been forwards to the Central and all state governments for being examined for incorporation in their respective rules. Other important matter under consideration are problem of small and medium newspapers and the issues of appointment of journalists on contract vis-a-vis Working Journalists and other Conditions of Service Act 1956.

The proposal of establishment of a common authority for contact regulation of the media and preservation of its freedom by extending the jurisdiction of Press Council over electronic as well as the print media and renaming it Media Monitoring Commission of India was also considered by the Council. After detailed deliberations and discussions the Council found no reason to deviate from its stand that while technology aspects may be handled separately by the Broadcasting Authority / Convergence Commission, freedom and standards of the print and electronic media should only be looked after by an independent peer body of the media, and the Council with extended jurisdiction over electronic media and 40 years of experience behind it, was the most appropriate institution to do so. The Council, therefore,

resolved to reiterate its proposal for conversion of the body into Media Monitoring Commission of India.

In its advisory capacity the Council provided the government and other authorities with its views on :

1. Human Rights, Freedom of Expression and Terrorism for U.N. Sub-Committee on Human Rights.
2. Proposed Law for Advertisement Standards Regulatory Commission (ASRC).
3. Short term measures for prevention of misleading advertisements.
4. Indo-Ivorian joint agreement.
5. Curbing obscenity in print media.
6. Consultation to UNDP and CMS regarding media Coverage of AIDS / HIV.
7. Competition (Amendment) Bill 2006.

The Council also initiated a process of consultation and dialogue with press / media Council and similar bodies in different parts of the world for active encouragement to preservation of the press room and promotion of its standards and ethics world wide. As a part of these efforts, the Chairman of the Council held discussions with Chairman of the British Press Complaints Commission, Sir Meyer in London as also with representatives / Chairpersons of Turkish Press Council, Azerbaijan Press Council's, WAPC General Secretary from U.S. Christopher R Conybeare, Media Council of Kenya, Media Council of Tanzania, Bangladesh Press Council and Media Council of Zambia.

Between June 8-12, 2006 he also represented the Council at Istanbul, Turkey in the Executive Council / General Body meeting of the WAPC, the umbrella organisation of the Press Councils and was elected the Vice President of the body with Prof. Oktay Eksi of Turkey as its President. The WAPC decided at this meeting to set up a permanent Head Quarter at Turkey instead of a floating Head Quarter with the incumbent Chairman.

The Chairman of the Council also addressed the Ethiopia Parliamentary Delegation visiting the country on the invitation of the Lok Sabha Secretariat.

In its efforts to encourage debates on media matters, the Council organized / participated in discussions in various parts of the country.

The National Press Day, this year was commemorated by the Press Council of India with an exhibition on photo journalism and a two day International symposia on November 16-17, 2006 at Vigyan Bhawan, New Delhi on Media matters to discuss "Journalism, Ethics and Society in the Age of Globalization" with special emphasis on "Role of Self Regulatory Bodies in Media" and "Ethics in Media". Hon'ble President of India, H.E. Dr. APJ Abdul Kalam inaugurated the celebrations in the presence of Hon'ble Minister of Information and Broadcasting, Mr. Priya Ranjan Dasmunsi and the Hon'ble Chief Minister, Government of National Capital Territory of Delhi, Smt. Shiela Dixit, A Souvenir released on the occasion carried valuable articles on the subject. Representatives of 11 countries participated in the deliberations, while several others made written contributions that greatly enriched the discussion. The Conclusions and Recommendations drawn up have been compiled as Symposia Document and were widely circulated.

The exhibition marked the special acknowledgment of the role of photo journalism as a chronicle of tomorrow's history. The Hon'ble Prime Minister of India,

Dr. Manmohan Singh after inaugurating the exhibition which featured works of photographers of international repute on November 15, 2006 at AIFACS Hall, Rafi Marg, New Delhi on November 15, 2006 recorded his opinion "These photographs offer a rich visual record of an India on the move. I hope they inspire our photographers and journalists to seek greater glory in their profession. The same day the Guest of Honour, Mr. Somnath Chatterjee Hon'ble Speaker of the Lok Sabha, released the Compendium on "Self-Regulator Mechanisms for the Media'', that provides at a glance, information on media regulatory bodies across the world.

During the year the inquiry procedure for the complaint cases filed against the press was simplified and made more user-friendly and the procedure for regulation of cases filed by the press for threats to its freedom, was drawn up and notified under gazette extraordinary.

The proposal for authority to the Council to enforce its directions was followed up and since then the Central and some of the State government have made provision for action under their Advertisement policies in respect of newspapers held guilty of violation of ethics by the Council.

The Council successfully published its quarterly house journals in Hindi and English that chronicle the activities important developments of the press world.

The website of the Council was enriched with the intest adjudications of the Council and other development and in an effort to garner greater revenue from fee levied on newspapers, the list of defaulting newspapers has been put on the website for general access and information. The Council also benefited from the augmentation of its hardware capacity.

The Press Council of India has been entrusted by the Parliament with the additional responsibility of functioning as an appellate Authority under Section 8 © under the PRB Act 1867 and the Appellate Board comprising of the Chairman of the Council and another member met regularly to hear the Appeals before it.

RESEARCH, REFERENCE AND TRAINING DIVISION

Set up in 1945, the Research, Reference and Training Division functions as an information-serving agency for the Ministry of Information and Broadcasting, its media units and their field offices. It serves as an information bank as well as an information feeder service to the media units to help their programming and publicity campaigns. It also studies trends in Mass Communication Media and maintains a reference and documentation service on Mass Communication. The Division provides background, reference and research material and other facilities for the use of the Ministry, its media units and others engaged in mass communication. The Division also looks after the training aspect of the Indian Information Service (IIS) officers in collaboration with the Indian Institute of Mass Communication (IIMC).

Apart from its regular service, the 'Diary of Events', brought out every fortnight, the Division compiles two annual reference works, one titled INDIA, an authentic work of reference on India, and the other, MASS MEDIA IN INDIA, a comprehensive publication on mass communication in the country. INDIA is simultaneously released in Hindi language under the title—BHARAT.

Reference Library : The Division has a well-stocked library with a large collection of documents on various subjects; bound volumes of select periodicals and various reports of the Ministries, Committees and Commissions. Its collection includes

specialised books on subjects pertaining to journalism, public relations, advertising and audio-visual media, all prominent encyclopaedia series, yearbooks and contemporary articles. The library facilities are available to accredited correspondents from both Indian and foreign Press and to government officials.

National Documentation Centre on Mass Communication: The National Documentation Centre on Mass Communication (NDCMC) was created in 1976 as a part of the Division on the recommendation of an Expert Committee set up by the Ministry, for collecting, interpreting and disseminating information about the events and trends in Mass Media through its periodical services. The NDCMC documents all news items, articles and other information material available on mass communication. The current activities of the Centre range from collecting and documenting information, to dissemination, not only for the development of cross-country mass communication but also for participation in the international information flow.

The information collected is maintained and disseminated through services like 'Current Awareness Service'—annotated index of select articles; 'Bibliography Service' - annotated subject index of articles; 'Bulletin on Films' - abstract of various developments in the film industry; 'Reference Information Service', 'Who's Who in Mass Media' - biographies of eminent media personalities; 'Honours Conferred on Mass Communicators' - details of awards conferred on Mass Communicators and 'Media Update' - diary of national and international media events.

The NDCMC also compiles and edits a reference annual Mass Media in India. It was first published in 1978. The Annual contains articles on various aspects of the mass media, information on the status of media organisations in Central Government, States and Union Territories. It also includes the general information on print and electronic media. The annual serves as a reference compendium for media practitioners, policy makers, researchers, teachers and students of journalism.

Training : Training for the Indian Information Service (IIS) officers has been an area deserving attention. Appreciating the need, RR&TD has been specially entrusted with the Training aspect of IIS officers under the Tenth Plan Period.

During the year more short-term refresher courses are proposed to be organised in various institutes of the country. The target is to train more than 75 people this year also. This is an ongoing project and it is intended to organise a number of short-term training courses for the entire 115 officers during the entire Plan period.

PHOTO DIVISION

Photo Division, an independent media unit meant for visual support for the varied activities of the Government of India, is a subordinate office of the Ministry of Information and Broadcasting and the biggest production unit of its kind in the country in the field of photography.

The Division is responsible for visual documentation and preparing of photographs both in Black & White and Colour initially, for both internal and external publicity on behalf of the Government of India.

The major function of the Photo Division is to document photographically, the growth, development and the political, economical and social changes in the country and to provide visuals (still) to the media units of the Ministry of Information & Broadcasting and other Central and State Government Agencies, Ministries /

Departments including President Secretariat, Vice-President Secretariat, Prime Minister's Office, Lok Sabha & Rajya Sabha Secretariats and Indian Missions abroad through XP Division of the Ministry of External Affairs.

External Publicity Division of the Ministry of External Affairs, DAVP and the PIB get the major support and services provided by the Photo Division. External Publicity Division of the Ministry of External Affairs takes the major chunk of its production for the external publicity of the Government of India. This includes extensive documentation of the visit of all the Heads of States / Government of Foreign countries and presentation of the albums of the documentation of these visits on the departure of VVIP's. PIB now get the major routine coverage of the local VIP's and uses the picture taken by the Division for the day-to day feeding to the Press through Internet. DAVP depends on the complete visual support from the archives of the Division, which has been developed during the last five decades, for the preparation / production of various kinds of Exhibition / advertising materials to be circulated amongst the large population of the country.

The Division also supplies photographs on payment both in Black & White and Colour to the non-publicity organizations and general public through its Pricing Scheme.

The Division has substantially updated its laboratories and equipment for handling different kinds of photographic production and assignments in Black & White and Colour both in conventional system as well as the state of art Digital technology. News Photo Network for transmission of images has been installed at the office of Photo Division, at Soochna Bhawan, New Delhi and the network could be linked from all corners for photo publicity of the Government activities.

The Division has established a Digital Photo Library at its Headquarter at Soochna Bhawan for digital storing of the conventional images acquired by the Division time to time. Processing of the transfer of the images from the conventional photo images to the digital form and placing it at Digital Photo Library is also in progress. Images acquired by the Digital System of Photography are available off line at the moment. However, it would be available online very soon.

During the Tenth Plan, the Division has also acquired a high capacity server (pending trial run). Approximately one lakh images are fed in it will soon be connected to its website which is likely to be launched very soon.

Till date the Division has been able to convert a total number of six lakhs thirtyfour thousand four hundred and twenty two (636422) images (cumulative figure) till December 2006 and place it in the Cumulus System as a part of its Digitalisation, Cataloguing and Archiving of images.

To keep a synergy between the other Media Units, the Division has taken up various measures. To avoid delay in sending photographs to newspaper through network, the Division is now equipped to send picture to the PIB desk without much delay. It has now been using V Data System to use wireless internet facility particularly for sending images of the Prime Minister from outside Delhi. To produce excellent publicity materials, the Director Photo Division took various steps to take up updated documentation be it for the printing of calendar or for thematic exhibitions etc. To disseminate its expertise it also took measures to organise Workshop etc. in collaboration with Media Units and also with State Government.

IMPORTANT TRAINING PROGRAMME/WORKSHOP ETC. CONDUCTED

TRAINING PROGRAMME ON DIGITALISATION TO B.N.A. GOVT. OF AFGHANISTAN

As a part of the MOU signed on co-operation in the field of Information and Broadcasting between Govt. of India and Afghanistan it was decided that India would assist Afghanistan in digitizing the conventional photo images (negatives) available in Bakhtar News Agency, Kabul and help in setting up a Digital Photo Archive. Accordingly, a two member team under the leadership of Director, Photo Division, Ministry of Information and Broadcasting, with a Senior Photo Officer of Photo Division, visited Kabul from 28th October 2006 to 6th November 2006 to conduct the training programme on the digital management of conventional photo images, and took initiative in starting of the Digital Photo Archive in Afghanistan by setting up the necessary inputs along with placing one hundred and seventy important images from the archive of the Photo Division of the visits of various Heads of Government of Afghanistan to India since 1959 including that of the last state visit of the President of Afghanistan H.E. Hamid Karzai in 2005.

During this 8 days' training programme before handling over the minimum required equipments for the setting up of the Digital Photo Achieve, the Photo Division has conducted a well designed programme for the training of 11 officials of Bakhtar News Agency. Among the participants there were six Photo Reporters and five Reporters of the agency including two women report of BNA.

MEDIA COMMUNICATION AND ROLE OF DIGITAL PHOTOGRAPHY

Photo Division conducted a workshop on "Media Communication and the role of Digital Photography" at Agartala in collaboration with the Department of the Information, Culture & Tourism, Govt. of Tripura and PIB Agartala. 30 Photo journalists working for the News Agency, and news papers published from Agartala, two representatives of electronic media and the state government's information department participated in the workshop.

MEDIA COMMUNICATION, THE ROLE OF DIGITAL PHOTOGRAPHY AND DIGITAL MANAGEMENT OF VISUAL IMAGES

Photo Division has designed a workshop, proposed to be held from 19th to 23rd February 2007, at New Delhi on the "Media Communication, the role of Digital Photography and the Digital Management of Visual images" for the photographers working with the Department of Information and Publicity of the State Governments and some Government establishments handling, digital photography. Invitations are being sent to the state governments and other institutions. A special emphasis has been given to the states of the North East region, Jammu & Kashmir and the Union Territory like Andaman & Nicobar Islands and Lakshadweep, requesting the respective state governments to nominate the photojournalists working in the state also.

NATIONAL PHOTO CONTEST

Photo Division organised successfully its 18th National Photo Contest on a very interesting theme "Life and Water". A tremendous response was received both from

the participants as well as the viewers of the Exhibition. A high level jury comprising Shri D. Krishnan, Photo Editor, the Hindu, Chennai, Shri S.N. Sinha, Photo Editor, Hindustan Times, New Delhi, Smt. Chitrangada Sharma, a noted Photo Artist and Shri Debatosh Sengupta, Director, Photo Division selected the award winning entries. The Exhibition was held in New Delhi, Kolkata and Siliguri.

The Division organized its 19th National Photo Contest on the theme "Happiness". The prize distribution ceremony and the exhibition of the award winning and selected photographs was held at New Delhi from 24th April to 30th April 2007. Secretary, Ministry of Information and Broadcasting presented the awards to the winners.

The Division was involved in working for main Calendar of the Govt. of India. Many photographs from the archives were used for preparing the outlines of the calendar. Later it took out a special drive in getting documented some important paintings, murals in different institutions and establishments etc. for giving final shape of the calendar. In addition the Division was involved in working for two more major calendar and one table calendar produced for the Ministry of the Road Transport and Highways and the Ministry for the Development of the North East Region.

As part of the initiative to upgrade the Archival record, the Division has collected and documented a large number of important images of Dr. Bidhan Chandra Roy, former Chief Minister of West Bengal and Mahajati Sadan, an organization of cultural standing of the Govt. of West Bengal and some other sources. In addition during the search the Division was able to get some important images of Netaji, Gandhi, freedom movement etc. from Mahajati Sadan.

The Division has mounted an exhibition titled "A Tribute to late Smt. Indira Gandhi, former Prime Minister of India". It was inaugurated by Shri Priyaranjan Das Munshi, Minister for Information & Broadcasting and Parliamentary Affairs on 19th November 2006 at Kolkata.

Photo Division brought out a book entitled 100 Years of Satyagraha, a pictorial album of Mahatma Gandhi.

Though the Division is not directly involved in the process of the public information campaign yet it has been active in supporting the exhibition put up by DAVP / PIB by supplying photographs for different sets of exhibitions.

The number of assignments both of Black & White and Colour covered, and prints / albums prepared produced by the Photo Division during the year 2006-2007 (up to march 2007) are as under :-

1.	News and Features assignments covered (both in B&W and Colour)	3971
2.	Digital images acquired in house	76441
3.	Digital images short listed for archive	10,521
4.	Total Black & White and Colour print supplied	138790
5.	Total Photo Albums / Wallets produced / prepared	112
6.	Digitalisation Pilot Project (out source)	392604
7.	Total number of images digitized (progressive fig.)	760000

PUBLICATIONS DIVISION

The Publications Division is a repository of books and journals highlighting national importance and India's rich cultural heritage. It is publishing books in English and Hindi as well as in all major Indian languages at affordable prices. The subjects range from art, history, culture, biographies of eminent persons, land and people, flora and fauna, children's literature, science and technology and Gandhian literature to works of references like India-A Reference Annual. The Division also brings out selected speeches of the Presidents and the Prime Ministers.

With headquarters at Delhi the Division functions through its various field units—Sales Emporia at New Delhi, Mumbai, Chennai, Kolkata, Patna, Lucknow, Hyderabad, Thiruvananthapuram and Yojana Offices at New Delhi, Mumbai, Kolkata, Chennai, Ahmedabad, Guwahati, Hyderabad and Bangalore. The offices of Employment News and Journals Unit are located in New Delhi.

Books: The Division brings out 120-150 titles every year. More than 7700 titles have been published so far. During the year from April 2006 to March 2007, 109 titles have been released in Hindi, English and other regional languages. Some of the important publications released during the period are: Dr. Zakir Hussain, Selected Speeches of Subhash Chandra Bose, Selected Speeches of Prime Minister Manmohan Singh (Vol II), Indian Navy, Tales from Tavi, Selected Speeches of Lal Bahadur Shastri, Gopal Bhand, Amir Khusrau (English), Sanskriti ke padav, Nanddas, Bharatiya Vesh Bhusha, Vigyan Hamare Aaspas, Ayurveda - Samanya Rog Aur Upchar (Hindi), Kalpana Chawla, Sulabh Panchatantra, Ancient India, The story of Telecommunications, Great men and women of India (Regional Languages). List of books published by the Publications Division is available at www.publicationsdivision.nic.in.

Journals: Apart from the books, the Division publishes 18 monthly journals, which are 'Bal Bharati, 'Ajkal' in Hindi and Urdu, 'Kurukshetra' in Hindi and English and 'Yojana' in Hindi, English, Urdu, Punjabi, Oriya, Bengali, Assamese, Gujarati, Marathi, Tamil, Telugu, Malayalam and Kannada.

Bal Bharati, the popular children's monthly in Hindi, is being published regularly since 1948. Its objective is to provide healthy entertainment to children while educating them and inculcating human values and scientific temper through short stories, poems, picture stories and informative articles. An essay competition was organised in which a large number of children from the schools of Delhi participated.

Ajkal, the prestigious literary magazine in Hindi and Urdu, brought out a number of special issues and covered different aspects of Indian culture and literature. The magazine entered its 60th year of publication in May 2004.

Yojana, the flagship journal of the Division seek to carry the message of planned development to all sections of society and serves as a forum to promote a healthy discussion representing a cross-section of views on socio-economic aspects of development. Published in 13 languages, Yojana presents an All India perspective while highlighting regional development, innovations and initiatives. For the series 'Shodh Yatra' Yojana has received 'Gian Media Award' 2006.

Kurukshetra, the journal on rural development is serving as a forum for exchange of ideas on programmes, policies and implementation status of development efforts in the rural sector. The journal is published on behalf of Ministry of Rural Development. Eminent authors are contributing to these columns.

Apart from this, the Division is also publishing 'India-A Reference Annual' and 'Bharat'. For the first time, the documents have been put on the Website.

Besides its own publications and journal, the Division also handles marketing of publications brought out by other Government Departments, State Governments and Autonomous Organisations such as National Book Trust, Sahitya Academy, CSIR, ICAR, ICCR etc. The official website of the Division is http;// publicationsdivision.nic.in

Employment News: The Division also brings out the weekly Employment News / Rozgar Samachar in English, Hindi and Urdu focussed on employment opportunities in the Government and Semi-Government Organisations / Departments, Public Sector Undertakings, Autonomous Bodies, Banks and Universities. The journal commands a weekly circulation of about 7 lakh copies. It has a network of about 300 sales agents and 4000 direct distributors spread all over the country. The circulation and revenue of the journal have shown sustained growth over the years. During 2006-07 the revenue was Rs 44.53 crore.

The illustrated career weekly of the Government added another feather to its cap by launching an interactive career oriented website under the domain www.employment news. gov. in.

Bharatendu Harishchandra Awards: The Bharatendu Harishchandra Awards, originally instituted to encourage original creative writing in Hindi on mass communication, are also given for children's literature, women's problems and national integration.

FILMS DIVISION

The Films Division was constituted in January 1948 by rechristening the erstwhile Information Films of India and the Indian New Parade set up in 1943, primarily for war coverage. The Cinematograph Act of 1918 was Indianised in 1952 which made the screening of documentary films compulsory throughout the country.

Since 1949, Films Division has been releasing a documentary or news- based or an animation film every single Friday for the theatres spread across the country, in 15 national languages. Over the decades, the Division has virtually recorded the country's entire post-independence history. With headquarters in Mumbai, Films Division is equipped with all facilities of production studios, recording theatres, editing rooms, animation unit, cameras, video set-up and preview theatres. Dubbing of films in 15 Indian languages is also done in–house.

The subjects of the documentaries, news magazines and animation films (nearly 52 every year) are as diverse as the country's richness, ranging from art, culture, industry, national events, environment, family welfare to science and technology.

For distributing the prints (nearly 250 every week) across the theatres of the country Films Division has ten Branches at Mumbai, Chennai, Thiruvananthapuram, Madurai, Hyderabad, Vijayawada, Bangalore, Nagpur, Lucknow and Kolkata.

The Films Division has become a veritable treasure house of more than 8000 films on almost anything that one needs to know about India. Moving ahead with the times, Films Division has also launched a broadband enabled interactive website www.filmsdivision.org where one can watch a film of ones choice at the click of a

mouse. The site has been uploaded with 220 hours of viewing time where one can also place orders for VCDs of their choice films.

The process of the digitalization of Films Division films has got a tremendous boost recently when the Ministry of Information and Broadcasting approved a project of digital restoration of all films with archival value. This on-going project of archiving more than 8000 films in to high-definition digital technology is set to replace the erstwhile film library completely.

Famed Cartoon Film Unit of Films Division has also become high-tech with computer animation replacing cell or classical animation. Equipped with the state-of-the-art technology both in hardware and software, the Unit now can churn out productions in U.S. animation, 2-D and 3-D animation with advanced software including Opus, Concerto High-End and Maya.

Committed to the basic objective of informing and educating the masses, Films Division has also been making fiction or featurette films on the ill effects of various social evils and on success stories. For this purpose the Division has two regional production centres at Bangalore and Kolkata. Many of the FD featurettes have got critical acclaim and awards.

The Mumbai International Film Festival (MIFF) is one of the most prestigious Competitive biennial International Film Festival for Documentary, Short and Animation Films. It is organised by Films Division (Mumbai) of Information and Broadcasting Ministry, Government of India in co-operation with Government of Maharashtra.

MIFF, which began way back in 1990, in Mumbai, has grown in size and stature, making its presence felt in almost all the film making countries of the world and is recognised as one of the best documentary film festivals.

MIFF is unique festival amalgamating short films, documentary, animation and electronic films. For over a decade it has been playing a pivotal role in identifying and promoting newer vistas in this genre of cinema.

MIFF documentary films festival, offers an amount of Rs 26.00 lakh approximately as total prize money alongwith real Golden / Silver Conches in addition to "Dr. V. Shantaram Lifetime Achievement Award" which carries a Trophy and Cash award of Rs 2.50 lakh "Dr. V. Shantaram Lifetime Achievement Award" was conferred on animation legend Shri Ram Mohan during the inaugural Ceremony of MIFF-2006.

The 9th edition of MIFF was held from 3-9 February 2006 at the P.L. Deshpande Maharashtra Kala Academy, Prabhadevi, Mumbai. The prestigious documentary film festival attracts the cream of distinguished filmmakers. Film critics, academicians, dignitaries and journalists from India and the world over.

A record number of 574 entries were received from 30 countries across the world for MIFF-2006. In all, 388 entries were received for National category and 186 entries for International Competition Section from 30 countries and also 202 films in Retrospective & Special package of 11 North East films to encourage the filmmakers from North Eastern Region. There was tremendous response for these films during MIFF-2006.

One Seminar and four Open Forums were organised as a part of the festival focusing on various aspects of Documentary and Short films. Renowned personalities from the related field were invited as panel speakers.

All information relating to MIFF-2006 is available on the website: www.filmsdivision. org. and www.miffindia.org.

In the role of a public media, much sought after now in the highly privatised west, Films Division has been diligently preserving public space and the people's right to information and enlightenment.

Major Achievements : During the year, Films Division produced a good number of films on various subjects like Biographic films: Rani Rashmoni, Kumar Gandharva, Renowned sculptor Ganapathy Sathapathy, Pt. Ram Narayan, Sankardeva. Films on Common Minimum Programme: India's Knowledge Economy-Marching Ahead, New Deal for Rural India. Film on health "No Scalpel Vasectomy, film on Population stabilisation "Empowered Action Group". Film on defence / army "Air Defence Control & Reporting in tactical battle area" & "Recovery technique using ARV's B-vehicles", etc. A biographic film on Late Shri K.R. Narayanan, former President of India is under production.

Webcasting and Digitalisation of Films Division Films : In view of its historical importance, the films of Films Division which have suffered decay and decomposition over time are required to be restored and preserved for posterity. Measures are envisaged in the present Scheme "Restoration and Preservation of Films Division's Archive", which is a modified proposal of the ongoing plan scheme "Webcasting and digitalisation of Films Division Films". Television has become important medium of dissemination of information alongwith extraordinary growth in the subscription of the internet. Hence Films Division has to change the mode of distribution of its Informative and Educative films trough these modern outlets. To comply with the purpose, Films Division's films have to be digitalised and preserved for transfer and broadcast and Films Division is also shortly undertaking the transfer of its celluloid films on High Definition Tapes at 4:2:0 at higher Bid rate (approx. 9 x MBPS) and also additional Digital Audio Transfer on High Definition Tapes. Up to March 2006, 1627 films having duration of 24 hrs. including the films of North East have also been digitalized and restored on HD tape.

With an object of providing international outlet to the films of Films Division it was contemplated to put 220 hrs. duration of films on the web. Films Division has already encoded about 330 hrs of films and uploaded the same on its official website www.filmsdivision.org. The films encoded were also metatagged to have easy access of various clippings. The website with webcasting of films received a positive response from various documentary film lovers all over the world. To meet the growing demand of video films and software, action is being taken to transfer these films DVD.

Films Library : The Films Library of Films Division is a treasure of valuable archival material of India's contemporary history, it's rich heritage and artistic traditions. It is in great demand by the film makers throughout the world. It contributes vital footage for the production of films by rendering services besides bringing out revenue through the stock footage sale. The total collection of film library is about 1.9 lakh items which include original picture negative, dupe / inter negative, sound negative, master / inter positives, saturated prints, international tracks, pre-dub sound negative, 16mm prints, library prints and answer prints, etc. All the films of archival value are being printed on DVD. Up to March 2006, 1627 films and International Tracks of 2437 films have been digitalized. Apart from that 41 films

having duration of 24 hrs. including the films of North East have also been digitalized and restored on High Definition tape.

Films Division provided sustained publicity and communication support through its documentaries, news magazines of video films for important national campaigns like Communal Harmony, National Integration, Eradication of Untouchability, Family Welfare Programmes, etc.

During the period from 1 April 2005 to 31 March 2006 the Division released 14150 prints of 39 documentary films and 14 News Magazines on important topics through its theatrical circuit.

CENTRAL BOARD OF FILM CERTIFICATION

The Central Board of Film Certification (CBFC), set up under the Cinematograph Act, 1952, certifies films for public exhibition in India. It consists of a Chairperson and twenty-five other non-official members. The Board has its headquarters at Mumbai and nine regional offices located at Bangalore, Kolkata, Chennai, Cuttack, Guwahati, Hyderabad, Mumbai, New Delhi and Thiruvananthapuram. The regional offices are assisted in the examination of films by advisory panels consisting of persons from different walks of life. Smt. Sharmila Tagore, a well-known film personality, is presently working as Chairperson of the Board.

A total of 43 Indian Feature Films and 16 Foreign Feature Films were refused certificates as they were found to violate one or more of the statutory guidelines issued by the Central Government under section 5B(2) of the Cinematograph Act, 1952. Some of them were subsequently certified in their revised versions.

The 108th meeting of the members of the Central Board of Film Certification was held on 27th March, 2006 at Hyderabad. The 109th meeting of the members of the Central Board of Film Certification was held on 31st July, 2006 at Bangalore. The 110th meting of the members of the Central Board of Film Certification was held on 17th December, 2006 at Puducherry. All the metings were presided over by Ms Sharmila Tagore, the Chairperson of the Board.

Workshops were held for Advisory Panel Members for censoring of films. As in the last year, workshops were arranged at various regional centres for the benefit of the members of the Advisory Panels and Examining Officers. Various issues involved in the examination of the films were discussed at the workshops and cut portions from some selected films were screened to illustrate the various guidelines for certification of films. The need for observing a code of conduct and discipline was also emphasised.

Under the Cinematograph Act, neither the Board nor the Central Government has power to enforce the Board's decisions at the time of public exhibition of films. The authority rests with the State Governments and Union Territory Administrations. The Board has, from time to time, sought to systematise the detection of interpolations in films.

During the period January to December 2006, 46 cases of interpolations in films were detected at various places and the verification reports were sent to the concerned Judicial Magistrates for necessary action.

The workload of CBFC has increased considerably due to the certification of film various channels as per the Mumbai High Court Judgement. The increase in certification of video films has increased from 4188 in 2005 to 7129 in 2006. In order

to speed up the certification work and meet the target and timelimit, CBFC has distributed the work of different satellite channels to different regions of CBFC. Additional Examining Officers have been taken on deputation from other Central Government Offices to dispose off the films.

NATIONAL FILM DEVELOPMENT CORPORATION LIMITED

The National Film Development Corporation Limited (NFDC) was incorporated in 1975. It got restructured in 1980 after amalgamation of Indian Motion Pictures Export Corporation (IMPEC) and Film Finance Corporation (FFC). The primary objective of NFDC is to foster excellence in cinema and to develop state-of-the-art technology in audio-visual and related fields. The main activities of the Corporation includes financing and producing of films with creative and artistic excellence, on socially relevant themes and experimental in form. The NFDC arranges distribution and dissemination of films through various channels. NFDC provides essential pre-production and post-production infrastructure to the film industry, keeping pace with the latest technology. The NFDC also endeavours to promote culture and understanding of cinema by organising Film Weeks, Indian Panaroma and Film Festivals in collaboration with Film Societies, National Film Circle and other Agencies representing Indian and Foreign Films.

The NFDC encourages the concept of low-budget films which are high in quality, content and social values. During 2005-06 (up to December 2005) the Corporation had exported 10 films. During the same period NFDC participated in 8 international and regional film festivals showcasing 19 Indian films.

NFDC's film PARINAAMAM (Malayalam) directed by Venu, has won international award for best screen play in ASHDOD International Film Festival, Israel.

The corporation in collaboration with CII has organised Film Bazaar at Goa during the 36th IFFI.

The Cine Artistes Welfare Fund of India set-up by NFDC, is the biggest ever trust in the Indian Film Industry with a corpus fund of Rs 4.48 crore. During the year 2005-06 (up to November 2005) an amount of Rs 31.70 lakh have been disbursed as pension to cine artistes.

DIRECTORATE OF FILM FESTIVALS

The Directorate of Film Festivals was set up under the Ministry of Information and Broadcasting in 1973 with the prime objective of promoting good cinema. This is undertaken by organising a range of activities under these broad categories.

(a) The International Film Festival of India.

(b) The National Film Awards and the Dada Saheb Phalke Award.

(c) Cultural Exchange Programme and organising screening of Indian films through the missions abroad.

(d) The selection of Indian Panorama.

(e) Participation in international film festivals abroad.

(f) Special film expositions on behalf of the Government of India.

(g) Print collection and documentation.

These activities provide a unique platform for exchange of ideas, culture and

experiences between India and other countries in the field of cinema. It also provides a powerful platform for Indian cinema and fosters commercial opportunities for Indian films. Within the country, the latest trends in global cinema are made accessible to the general public, film industry and students.

The International Film Festival of India : The International Film Festival of India was held in Goa from 23 November - 3 December 2006. The festival screened a total of 184 films, representing participation from over 43 countries and the films have been screened at the best theatres in Panaji and Madgaon, Goa.

NATIONAL FILM ARCHIVE OF INDIA

The National Film Archive of India was established in February 1964 as a media unit under the Ministry of Information and Broadcasting. The primary charter of NFAI is to safeguard the heritage of Indian Cinema for posterity and act as a centre for dissemination of a healthy film culture in the country. Promotion of film scholarship and research on various aspects of Cinema also form part of its objectives. Familiarising foreign audiences with Indian Cinema and to make it more visible across the globe is another declared function of the Archive.

NFAI has been a member of the International Federation of Film Archives since May 1969, which enables it to get expert advice and material on preservation techniques, documentation, etc. The archive has its own film vaults designed according to international film preservation standards. The construction of specialised vaults for preserving colour films is underway. The well-stocked library of over 25,000 books on Cinema published across the globe is a boon to serious students of Cinema. More than 100 Indian and foreign journals on Cinema are received in the library. Over 30,000 filmscripts both Indian and foreign received from the Central Boards of Film Certification are also preserved in the Archive.

It is an ongoing job at the Archive to trace and acquire national and international films to enrich its collection. The well-stocked library of about 30,000 books on Cinema published across the globe is a reservoir of information to serious students of Cinema. More than 100 Indian and foreign journals on Cinema are received in the libaray. Over 30,000 filmsscripts both Indian and foreign received from the Central Boards of Film Certification are also preserved in the Archive.

The Research and Documentation Centre has a large collection of ancillary material on Indian Cinema. This Centre attempts to collect photographs / stills, song-booklets, wallposters, pamphlets and other publicity material of films certified by the various Film Certification Boards in the country.

The NFAI encourages and promotes research and academic activities on every aspect of Cinema. It assigns monographs on eminent Indian filmmakers and pioneering film personalities, research fellowships on themes related to Indian cinema, and aural history recordings of senior artists and technicians. The Archive has published 12 such projects so far. As a part of its activities of disseminating film culture, NFAI has a Distribution Library of films which supplies films to film societies, educational institutions and cultural organisations in the country. It also conducts joint-screening programmes at centres like Mumbai, Kolkata, Bangalore, Chennai, Hyderabad, Thiruvananthapuram, Cochin, Jamshedpur, Pune and Delhi. It is a major source of films for international film festivals in India and abroad.

NFAI has been conducting its Annual Film Appreciation Course of four weeks duration at Pune in collaboration with Film and Television Institute of India for the

last three decades. Participants from different professions from all over India are exposed to the best of Indian and World Cinema. Among the major topics taught are the Basics of the Film Medium, Cinema as an Art, Film History, Film Theory, Relationship of Cinema with other Arts and so on. The Archive also coordinates short-term courses on similar lines in collaboration with educational institutions and cultural organisations outside Pune.

A large number of scholars and researchers on Cinema from within the country and abroad look forward to NFAI as a major resource Centre where they have easy access to the largest repository of Indian Cinema and perhaps the best library of books on Cinema and related arts in the country. The website of NFAI can be visited at http: / / www.nfaipune.gov.in.

CHILDREN'S FILM SOCIETY, INDIA

Children's Film Society, India (CFSI) was established in 1955 to provide value-based entertainment to children through the medium of films. CFSI is engaged in production, acquisition, distribution / exhibition and promotion of children's films. The Head Office of the CFSI is located in Mumbai with branch / zonal offices in New Delhi and Chennai. Films produced / procured by the Society are exhibited through State / Districtwise Children's Film Festivals as well as through theatrical, non-theatrical exhibition in schools through Distributors, NGOs, etc. Children's Film Festivals (both State and District level) were conducted in North East Region during April-May 2006. These were in Meghalaya, Assam, Tripura where a total of more than 206 shows were organised for approximately 97000 children. CFSI also markets its films on video cassettes and CDs. CFSI films are telecast regularly on television channels. The films produced by CFSI were screened in various National and International Film Festivals and have won many awards. CFSI participated in many International Film Festivals during the year 2006-07. CFSI holds its own International Children's Film Festival every alternate year. To commorate 50 years of its meaningful existence the CFSI organised a Golden Jubilee Film Festival during 14 to 18 November 2006 at Sirifort Auditorium, New Delhi.

DIRECTORATE OF ADVERTISING AND VISUAL PUBLICITY

The Directorate of Advertising and Visual Publicity (DAVP) is the nodal multi-media agency of the Government to meet the publicity requirements of various Ministries and Departments in a cost-effective manner. It provides single window service for publicising Government Policies and Programmes from conception to design and execution through various media formats including press advertisements, print publicity (Folders, Posters, Brochures, Kits, Booklets, Calendars and Diaries), outdoor publicity (Hoardings, Bus-Back Panels, Banners, Kiosks, Computer Animation displays, etc.), audio-visual publicity (Audio-Video spots, short films, docu-dramas, jingles, sponsored programmes, etc.) and exhibitions. DAVP with its headquarters in New Delhi, has two Regional Offices at Bangalore and Guwahati, besides 32 Field Exhibition Units across the country.

Press Advertisements : DAVP has on its panel over 3000 newspapers and periodicals in 22 languages covering all states for release of advertisements. Empanelment of publications is done as per the guidelines and procedures of the Advertisement Policy of the Government of India. The primary objective is to secure the widest possible coverage through advertisement keeping in view the message,

target and the budget, 19,010 advertisements were released by the Directorate in the financial year 2006-2007.

Audio Visual Publicity : The Audio Visual Cell of DAVP produces and broadcasts / telecasts programmes and spots on social themes for Ministries / Departments. DAVP arranges telecast / broadcast of Audio / Video spots on AIR, Doordarshan and private radio / television channels. The audio / video programmes are produced through empanelled producers. These programmes include audio and video spots / jingles, sponsored and folk music based radio programmes, promotional tele-films which are dubbed in Hindi, English and regional languages for national telecast / broadcast. 1,34,380 audio-video programmes including radio spots / jingles, 467 video spots / films and sponsored radio / video programmes were also produced in different languages during 2006-2007.

Printed Publicity : Different kinds of publicity materials like posters, folders, booklets, brochures, calendars, diaries, wall hangers, stickers, etc., are designed and produced by DAVP in Hindi, English and various Indian languages to take socially relevant messages of the Government of India to the masses. During the year 2006-2007, DAVP brought out publicity items in various languages worth Rs. 570.35 Lakh.

Exhibitions : Photo exhibitions are important means of propagating messages of national development and other issues of social relevance. DAVP conceptualises, designs, develops and mounts exhibition material, montages and artefacts for exhibitions on specific themes. In the year 2006-2007, 704 photo exhibitions were held all over the country, over a period of 2,860 exhibition days.

Outdoor Publicity : Publicity through various outdoor formats like hoardings, wall paintings, cinema slides, computerized animation displays, kiosks, bus queue shelters, bus-back panels, etc., are utilised by DAVP to display messages on policies / programmes of Ministries / Departments of the Central Government. It is a conventional but an effective means of spreading any message and the displays serve as a constant reminder to passers by and viewers. In 2006-2007, a total number of 7870 displays worth Rs 449.38 Lakh were executed by the Directorate.

Mass Mailing : The Mass Mailing Wing of DAVP has over 16.5 lakh addresses to reach out to a wide spectrum of people across the country. Over 1.18 crore copies of printed material were dispatched to various mailing addresses during 2006-2007.

Studio : DAVP has a full-fledged Studio with qualified artists for designing of publicity material required for different campaigns. The designs are mostly prepared in-house, keeping in mind the special publicity requirements of the region where the publicity campaign is to be launched. The Studio is equipped with DTP facility for making designs for Print Publicity, Press Advertisements, Outdoor Publicity, etc.

DIRECTORATE OF FIELD PUBLICITY

The Directorate of Field Publicity with its headquarters in New Delhi is the largest rural oriented interpersonal communication medium in the country. It operates as a two-way channel for dissemination of information among masses and gathering feed back for the Government. It acts as a bridge between the people and the Government. Established in 1953 as 'Five Year Plan Publicity Organisation' with sole objective of publicity of Five Year Plans, the Directorate assumed its present format and role in 1959 with its publicity scope widened and made all inclusive.

Over the years, its area of operation as also its aims and objectives have diversified. These in brief are: (a) to inform, educate, motivate and involve the people of India, especially at the grassroot level, in the process of development so that the vision of the framers of the constitution as outlined in its preamble is realised. (b) to generate public opinion for the implementation of developmental programmes and mobilise popular participation in the process of nation building. (c) to keep the public, especially the weak, the marginal and the remotely placed, informed about the policies and the programmes of the Government and generate awareness on several national and social issues of relevance. (d) to keep the Government informed of the people's reactions to its programmes and policies and their implementation at the field level thereby facilitating corrective measures as and where required.

DFP communicates with the people through various mode of communication-inter personal communication is the essence of all its programme activities. The Directorate resorts largely to interactive medium like Group Discussions, Seminars / Symposia, Public Meetings, Elocution Contest, Question-Answer sessions, etc., to convey its message to the masses. It also resorts to visual and live entertainment programmes like Film shows, Photo Exhibitions, Song & Drama, etc., to communicate with the people. The Directorate also conducts competitions like quiz, essay, drawing and painting, slogan writing and rural sports, etc., to disseminate message on the chosen themes. Providing feed back of public perception to the authorities is also major function of DFP.

During the year the Directorate conducted massive awareness campaign on National Rural Health Mission, AIDS Awareness, Iodine Deficiency Disorders Control, Non-Conventional Energy Sources. Legal Literacy and Free Legal Aid Programmes for the poor, Common Minimum Programme of UPA Govt., etc. Public Information Campaign was a new and important feature of the publicity activities of the Directorate. DFP participated in about 100 PIB led PICs on Bharat Nirman in different parts of the country. In every PIC four Field Publicity Units were deployed for five days of pre PIC phase and five days of main PIC. In all the PICs DFP put up a stall where information on a variety of topics of public interest was disseminated. DFP ensured that people in large numbers particiapted in the PICs acrossthe country.

Observance of Days and Weeks of National Importance is yet another way DFP whereby help generate public participation in nation building process by instilling nationalism and communal harmony among the people. During the year DFP observed all the important Days and Weeks of national importance in a befitting manner.

Covering of Fairs, Festivals and Crowd Points is DFP's yet another important way of interacting with the people. During the year DFP covered important states level and National level Fairs and Festivals and disseminated messages. During the year 2006-07, DFP organized 37824 Films shows, 2997 Song & Drama, 10333 Special Programmes, 5422 Oral communications, 31896 Photo Exhibitions, 60440 Group Discussion and gathered 7382 Public reaction reports on various policies and programmes of the Government from all parts of the country.

SONG AND DRAMA DIVISION

The Song and Drama Division of the Information and Broadcasting Ministry is a unique organisation with a specific mandate of socio-cultural and development communication. It was set up in October 1954 as a unit of All India Radio and given

the status of an independent media unit in 1960. It was established for tapping the resourceful live media, particularly the traditional and the folk forms for plan publicity. It has the advantage of instant rapport with the people and the flexibility in its forms to incorporate new ideas effectively. It utilises a wide range of stage forms such as drama, folk and traditional plays, dance-drama, folk recitals and puppet shows besides the Sound and Light medium to focus the attention of the audience on important aspects of the country's life and development in different-fields. On an average, the Division puts up about 40,000 programmes all over the country every year involving, over 10,000 artistes from across the nation. It has more than 700 registered troupes of various categories such as Drama, Composite programme, Folk and Traditional recitals, Mythological recitals, Puppetry, Magic, etc. The Division specialises in a judicious mix of information, education and entertainment.

The Division has 12 Regional Centres at Bangalore, Bhopal, Chandigarh, Chennai, Delhi, Dehradun, Raipur, Guwahati, Kolkata, Lucknow, Ranchi and Pune. It has 9 sub-centres and border centres located at Bhubaneswar, Darbhanga, Hyderabad, Imphal, Jodhpur, Nainital, Patna, Shimla and Srinagar (Jammu).

Border Publicity Scheme was introduced in Song and Drama Division in 1966 with the objective to boost up morale of the people along the sensitive international boundaries and keep them bound to the country's unity and integrity. The Border Publicity Centres are situated at Darbhanga, Guwahati, Jammu, Jodhpur, Imphal, Nainital and Shimla. In 1967 Armed Forces Entertainment Wing was set up with a view to entertain the Jawans posted in forward areas. Of the nine troupes one is located at Chennai and the rest are at Delhi. A new medium, an amalgam of Sound and Light and live action was adopted by Song and Drama Division in 1967 after seven years of successful trial. There are three Sound and Light Units one each at Allahabad, Bangalore and Delhi and are known for producing programmes of excellent standards with production and technical proficiency. The Division set up a tribal centre at Ranchi in 1980 for participation of tribals in the programme activities for the welfare of tribal people. The Tribal centre has presented 688 programmes during 2005-2006. The scheme covers the tribal belt of Bihar, Orissa, Jharkhand, Madhya Pradesh and Chhattisgarh.

Song and Drama Division puts up field programmes in coordination with the sister media units of Ministry of Information and Broadcasting, Central/state Government Departments and voluntary organisations. The Division works in close coordination with the Ministry of Health and Family Welfare, Defence, Rural Development, Department of Women and Child Development, Human Resources Development, etc. During the year the Division organised numerous programmes on the broad national themes and Government policies. These programmes were put up mostly in rural and semi-urban areas.

The Sound and Light units of the Division presented 21 shows of Samar Yatra during the year 2005-2006. The Division presented programmes for the Ministry of Health and Family Welfare on different themes for health awareness all over the country. About 7100 programmes on Prevention of AIDS, on use of iodized salt and other health related themes were organised. Special publicity was undertaken in sensitive and inner line areas of North-Eastern States, Jammu and Kashmir and other border areas of the country.

TRAINING

FILM AND TELEVISION INSTITUTE OF INDIA

The FTII, Pune, is a premiere institution for imparting training in the art and craft of filmmaking and television production. It conducts three-year post-graduate diploma courses in film and television and one-year certificate course in television. Now, it has also started a one-year certificate course in feature film screenplay writing and a two-year diploma course in Acting. From the academic year 2005-06, the Institute has launched a two-year post-graduate diploma course in art direction in which 12 candidates were admitted and 1½-year certificate course in animation and computer graphics. The Institute conducts in-service training courses for Doordarshan personnel in television production and technical operations, and has completed training of more than five thousand trainees of till now. The Institute also conducts short-term courses in various media-related professional subjects.

The Institute regularly enters its student films in national and international festivals in both competitive and non-competitive sections to ensure greater exposure and visibility of its works. Several of these films have gone on to win national and international awards. The Institute is also involved in strengthening ties with other leading film schools in the world by way of exchange programmes for its students as well as faculty members.

One of the important annual features of the FTII is conducting of four-week summer course in film appreciation in collaboration with National Film Archive of India, Pune.

SATYAJIT RAY FILM AND TELEVISION INSTITUTE

Satyajit Ray Film and Television Institute (SRFTI), Kolkata, an autonomous academic institution under the Ministry of Information and Broadcasting, was registered in 1995 under the West Bengal Societies Registration Act, 1961. The Institute is a National Centre offering 3 year post-graduate diploma courses in: (i) Film Direction and Screenplay Writing; (ii) Motion Picture Photography; (iii) Editing (Film and Video) and (iv) Sound Recording. The Institute holds an all India basis competitive examination each year, to select prospective students for its different streams. Documentary Films titled 'Chen Pao-Chinese Chilly Sauce', 'Here is my Nocturne' and 'Flights of Distress' have got the official entry in the Mumbai Film Festival 2006. It is a matter of rare distinction that the documentary 'Here is My Nocturne' has been selected for screening at the Cannes Film Festival-2006. Many of the Institute's productions got invitations of many national and international film festivals both in India and abroad. The efforts of the Institute's students always garner wide appreciation from the cine lovers across the globe. The Institute regularly organises Seminars / Conferences / Exhibitions on Films and visual arts / media, sometimes jointly with some reputed organisations. The Institute has organised 'Doccedge-2005'—an International Workshop for script development, pitching and co-production was organised in the Institute in the month of December 2005. The event registered a grand success. Besides the Institute organised special training programme for IIS-Probationers / Officers and numerous other educational organisation like Kendriya Vidyalaya.

INDIAN INSTITUTE OF MASS COMMUNICATION

The Indian Institute of Mass Communication (IIMC) which was set up in response

to a need felt to evolve a methodology and effective use of communication resources as a part of the country's overall development strategy, made a small beginning on 17 August 1965, as a department of the Ministry of Information and Broadcasting, Government of India. Later it was registered as an autonomous organisation under the Societies Registration Act (XXI) of 1860 on 22 January 1966. The Institute which receives funds for its recurring and non-recurring expenditure as grant-in-aid from the Government of India through the Ministry of Information and Broadcasting, is today recognised as a "Centre of Excellence" in the field of communication teaching, training and research. It provides knowledge and skills to young communicators in a variety of disciplines including print, photography, radio and television, as also development communication, communication research, advertising and public relations.

The Institute also collaborates with national and international agencies in conducting training, seminars and workshops as well as in undertaking joint research projects. It also conducts short courses addressed to the specific needs of the industry, government and public sector organisations.

During the year 2005-06, the IIMC conducted the following long-term training programmes and Diploma Courses: (a) Orientation Course for Officers of the Indian Information Service (Group-A); (b) Post-Graduate Diploma Course in Journalism (English) at New Delhi and Dhenkanal (Orissa); (c) Post-graduate Diploma Course in Journalism (Hindi); (d) Post-graduate Diploma Course in Advertising and Public Relations; (e) Post-graduate Diploma Course in Radio & TV Journalism; (f) Post-graduate Diploma Course in Oriya Journalism; and (g) Diploma Course in Development Journalism.

In addition, the Institute runs short-term academic programmes for middle and senior level officers of the Indian Information Service and the personnel of different media units.

The Institute also provides consultancy services on request to Central and State Government Departments and Public Sector Undertakings, and helps in designing and organising training and research programmes related to Development Communication.

Continuing the tradition of the non-aligned movement's efforts to improve journalistic skills in developing countries as well as to evolve a third world perspective, the Institute offers a Diploma Course in Development Journalism. Two such courses are held every year, each of four months' duration. The 45th course in the series (Aug-Nov) commenced on 1 August 2005.

During the Ninth Five Year Plan, in order to meet the growing demand for quality education in the field of mass communication and develop communication education in remote areas, IIMC Centres were set up in Dhenkanal (Orissa), Dimapur (Nagaland), Kottayam (Kerala) and Jhabua (Madhya Pradesh).

The IIMC branch at Dhenkanal is fully functional since August 1993 and is attracting a large number of students from the Eastern Region. The branch has all infrastructure facilities and is conducting two Post-graduate Diploma Courses in Journism (English and Oriya).

As part of the initiative in the Northeast and under the Plan Scheme ''Collaboration with Regional Centres of Learning'' IIMC has entered into a collaboration with Nagaland University for organising Post-Graduate Diploma

Course in Journalism and Mass Communication. The MoU between Indian Institute of Mass Communication and Nagaland University in this regard was signed on 17 September 2004. The first such course with 14 students commenced from 20 January 2005.

The IIMC has established a Community Radio Station ‘‘Apna Radio FM 96.9 MHz.’’ Inaugurated on 9 September 2005 it provides hands-on experience to the students in public service broadcasting.

22 Planning

PLANNING in India derives its objectives and social premises from the Directive Principles of State Policy enshrined in the Constitution. Public and private sectors are viewed as complementary. The private sector covers, besides organised industry, small-scale industries, agriculture, trade and housing, construction and related areas. Individual efforts and private initiatives are considered necessary and desirable in the national endeavour for development with optimum voluntary cooperation.

The Prime Minister of India, Dr. Manmohan Singh is the Chairman of the Planning Commission and Shri Montek Singh Ahluwalia is its Deputy Chairman. The Members of the Planning Commission include Shri Pranab Mukherjee, Minister of Defence; Shri Arjun Singh, Minister of Human Resource Development; Shri Sharad Pawar, Minister for Agriculture and Consumer Affairs, Food and Public Distribution; Shri Lalu Prasad Yadav, Minister of Railways; Shri P. Chidambaram, Minister of Finance; Shri Dayanidhi Maran, Minister of Communications and Information Technology, and Shri M.V. Rajashekharan, Minister of State for Planning, as ex-officio Member and Dr. Kirit Parikh, Prof. Abhijit Sen, Dr. V. L. Chopra, Dr. Bhalchandra Mungekar, Dr (Ms.) Syeda Hameed, Shri B.N. Yugandhar and Shri Anwar-ul-Hoda as full-time Members.

FIRST PLAN

Keeping in view the large-scale import of foodgrains in 1951 and inflationary pressures on the economy, the First Plan (1951-56) accorded the highest priority to agriculture including irrigation and power projects. About 44.6 per cent of the total outlay of Rs 2,069 crore in the public sector (later raised to Rs 2,378 crore) was allocated for this purpose. The Plan aimed at increasing the rate of investment from five to about seven per cent of the national income.

SECOND PLAN

The Second Five-Year Plan (1956-57 to 1960-61) sought to promote a pattern of development, which would ultimately lead to the establishment of a socialistic pattern of society in India. Its main aims were (i) an increase of 25 per cent in the national income; (ii) rapid industrialisation with particular emphasis on the development of basic and heavy industries; (iii) large expansion of employment opportunities; and (iv) reduction of inequalities in income and wealth and a more even distribution of economic power. The Plan aimed at increasing the rate of investment from about seven per cent of the national income to 11 per cent by 1960-61. It laid emphasis on industrialisation, increased production of iron and steel, heavy chemicals including nitrogenous fertilizers and development of heavy engineering and machine building industry.

THIRD PLAN

The Third Plan (1961-62 to 1965-66) aimed at securing a marked advance towards self-sustaining growth. Its immediate objectives were to: (i) secure an increase in the national income of over five per cent per annum and at the same time ensure a pattern of investment which could sustain this rate of growth in the subsequent Plan periods; (ii) achieve self-sufficiency in foodgrains and increase agricultural

production to meet the requirements of industry and exports; (iii) expand basic industries like steel, chemicals, fuel and power and establish machine building capacity so that the requirements of further industrialisation could be met within a period of about 10 years mainly from the country's own resources; (iv) fully utilise the manpower resources of the country and ensure a substantial expansion in employment opportunities; and (v) establish progressively greater equality of opportunity and bring about reduction in disparities of income and wealth and a more even distribution of economic power. The Plan aimed at increasing the national income by about 30 per cent from Rs 14,500 crore in 1960-61 to about Rs 19,000 crore by 1965-66 (at 1960-61 prices) and per capita income by about 17 per cent from Rs 330 to Rs 386 over the same period.

ANNUAL PLANS

The situation created by the Indo-Pakistan conflict in 1965, two successive years of severe drought, devaluation of the currency, general rise in prices and erosion of resources available for Plan purposes delayed the finalisation of the Fourth Five Year Plan. Instead, between 1966 and 1969, three Annual Plans were formulated within the framework of the draft outline of the Fourth Plan.

FOURTH PLAN

The Fourth Plan (1969-74) aimed at accelerating the tempo of development of reducing fluctuations in agricultural production as well as the impact of uncertainties of foreign aid. It sought to raise the standard of living through programmes designed to promote equality and social justice. The Plan laid particular emphasis on improving the conditions of the less privileged and weaker sections especially through provision of employment and education. Efforts were directed towards reduction of concentration of wealth, income and economic power to promote equity.

The Plan aimed at increasing the net domestic product (at 1968-69 factor cost) from Rs 29,071 crore in 1969-70 to Rs 38,306 crore in 1973-74. The average annual compound rate of growth envisaged was 5.7 per cent.

FIFTH PLAN

The Fifth Plan (1974-79) was formulated against the backdrop of severe inflationary pressures. The major objectives of the Plan were to achieve self-reliance and adopt measures for raising the consumption standard of people living below the poverty line. This Plan also gave high priority to bringing inflation under control and to achieving stability in the economic situation. It targeted an annual growth rate of 5.5 per cent in the national income. Four Annual Plans pertaining to the Fifth Plan period were completed. It was subsequently decided to end the Fifth Plan period with the close of the Annual Plan 1978-79.

SIXTH PLAN

Removal of poverty was the foremost objective of the Sixth Plan (1980-85). The strategy adopted was to move simultaneously towards strengthening the infrastructure for both agriculture and industry. Stress was laid on tackling inter-related problems through a systematic approach with greater management, efficiency and intensive monitoring in all sectors and active involvement of people in formulating specific schemes of development at the local level and securing their speedy and effective implementation.

The actual expenditure in the Sixth Plan stood at Rs 1,09,291.7 crore (current price) as against the envisaged total public sector outlay of Rs 97,500 crore (1979-80 prices) accounting for a 12 per cent increase in nominal terms. The average annual growth rate targeted for the Plan was 5.2 per cent.

SEVENTH PLAN

The Seventh Plan (1985-90) emphasised policies and programmes, which aimed at rapid growth in foodgrains production, increased employment opportunities and productivity within the framework of basic tenets of planning, namely, growth, modernisation, self-reliance and social justice. Foodgrains production during the Seventh Plan grew by 3.23 per cent as compared to a long-term growth rate of 2.68 per cent between 1967-68 and 1988-89 and the growth rate of 2.55 per cent in the eighties due to overall favourable weather conditions, implementation of various thrust programmes and concerted efforts of the Government and the farmers. To reduce unemployment and consequently, the incidence of poverty, special programmes like Jawahar Rozgar Yojana were launched in addition to the existing programmes. Due recognition was accorded to the role, small-scale and food processing industries could play in this regard. The total expenditure during the entire Seventh Plan stood at Rs 2,18,729.62 crore (current prices) as against the envisaged total public sector outlay of Rs 1,80,000 crore, resulting in a 21.52 per cent increase in nominal terms. During this Plan period, the Gross Domestic Product (GDP) grew at an average rate of 5.8 per cent exceeding the targeted growth rate by 0.8 per cent.

ANNUAL PLANS

The Eighth Five-Year Plan (1990-95) could not take off due to the fast-changing political situation at the Centre. The new Government, which assumed power at the Centre in June 1991, decided that the Eighth Five-Year Plan would commence on 1 April 1992 and that 1990-91 and 1991-92 should be treated as separate Annual Plans. Formulated within the framework of the Approach to the Eighth Five-Year Plan (1990-95), the basic thrust of these Annual Plans was on maximisation of employment and social transformation.

EIGHTH PLAN

The Eighth Five-Year Plan (1992-97) was launched immediately after the initiation of structural adjustment policies and macro stabilisation policies, which were necessitated by the worsening Balance of Payments position and the position of inflation during 1990-91. The various structural adjustment policies were introduced gradually so that the economy could be pushed to a higher growth path and improve its strength and thus prevent a crisis in Balance of Payments and inflation in the future. The Eighth Plan took note of some of these policy changes, which were to come about due to these reforms. The Plan aimed at an average annual growth rate of 5.6 per cent and an average industrial growth rate of about 7.5 per cent. These growth targets were planned to be achieved with relative price stability and substantial improvement in the country's Balance of Payments.

Some of the salient features of economic performance during the Eighth Five-Year Plan indicate, among other things, (a) a faster economic growth, (b) a faster growth of the manufacturing sector and agriculture and allied sectors, (c) significant growth rates in exports and imports, improvement in trade and current account deficit, and a significant reduction in the Central Government's fiscal deficit.

However, a shortfall in expenditure in the Central sector due to inadequate mobilisation of internal and extra budgetary resources by the PSUs and various departments was witnessed. In the States sector, the reason for the shortfall was lack of mobilisation of adequate resources due to deterioration in the balance of current revenues, erosion in the contribution of state electricity boards and state road transport corporations, negative opening balance, mounting non-Plan expenditure and shortfalls in the collection of small savings, etc.

The total expenditure during the entire Eighth Plan stood at Rs 4,95,669 crore [by taking 1996-97 (RE) as actual] at current prices as against envisaged total public sector outlay of Rs 4,34,100 crore (1991-92 prices) resulting in a 14.2 per cent increase in nominal terms. The Eighth Plan envisaged an annual average growth rate of 5.6 per cent. Against this an average annual growth rate of 6.8 per cent was achieved during this plan period.

NINTH PLAN

The Ninth Plan (1997-2002) was launched in the fiftieth year of India's Independence. The Plan aimed at achieving a targeted GDP growth rate of seven per cent per annum and there was emphasis on the seven identified Basic Minimum Services (BMS) with additional Central Assistance earmarked for these services with a view to obtaining a complete coverage of the population in a time-bound manner. These included provision of safe drinking water, availability of primary health service facilities, universalisation of primary education, public housing assistance to shelter-less poor families, nutritional support to children, connectivity of all villages and habitations and streamlining of the public distribution system with a focus on the poor. The Plan also aimed at pursuing a policy of fiscal consolidation, whereby the focus was on sharp reduction in the revenue deficit of the Government, including the Centre, States and PSUs through a combination of improved revenue collections and control of inessential expenditures, particularly with regard to subsidies and through recovery of user charges and decentralisation of planning and implementation through greater reliance on States and Panchayati Raj institutions.

The Specific objectives of the Ninth Plan included: (i) priority to agriculture and rural development with a view to generating adequate productive employment and eradication of poverty; (ii) accelerating the growth rate of the economy with stable prices; (iii) ensuring food and nutritional security for all, particularly the vulnerable sections of society; (iv) providing the basic minimum services of safe drinking water, primary health care facilities, universal primary education, shelter, and connectivity to all in a time-bound manner; (v) containing the growth rate of population; (vi) ensuring mobilisation and participation of people at all levels; (vii) empowerment of women and socially disadvantaged groups such as Scheduled Castes, Scheduled Tribes and Other Backward Classes and minorities as agents of socio-economic change and development; (viii) promoting and developing people's participatory institutions like Panchayati Raj institutions, cooperatives and self-help groups; and (ix) strengthening efforts to build self-reliance.

The Ninth Plan envisaged an average target growth rate of 6.5 per cent per annum in GDP as against the growth rate of 7 per cent approved earlier in the Approach Paper. The scaling down of the target was necessitated by the changes in the national as well as global economic situation in the first two years of the Ninth Plan. Against this, the achievement in the growth-rate on an average was to be 5.5 per cent per annum.

Achievements : During the period from 1950-51 to 2002-03, the national income - Net National Product (NNP) had increased 8.7 times from Rs 1,32,367 crore to Rs 11,56,714 crore (at 1993-94 prices) implying a compound growth rate of 4.2 per cent per annum. The per capita income (NNP) had increased three times from Rs 3,687 to Rs 10,964 (at 1993-94 prices) registering a compound growth rate of 2.1 per cent—all the aggregates measured at factor cost at 1993-94 prices.

The following table gives the growth performance of the Indian economy in terms of GDP, relative to the targets set in the various Plans right since the inception of planning in India. The economy has performed better than the target in five of the nine previous plans, and even in the Second Plan, the gap was not large. As far as the Third and Fourth Plans are concerned, the shortfalls were largely due to severe exogenous shocks that could not possibly have been predicted including the drought years of 1965 and 1966 and the Indo-Pakistan War of 1965. The Fourth Plan experienced three consecutive years of drought (1971-73) and the first shock of rises in oil-price of 1973. More importantly, since the Fourth Plan, the growth rate of the economy had improved steadily until the Ninth Plan, when it received a setback. Thus, the evidence suggests that the track record of planning in India has been reasonably good, and indeed tends to err on the side of caution.

GROWTH PERFORMANCE IN THE FIVE-YEAR PLANS

(per cent per annum)

Sl.No.	Plan	Target	Actual
1.	First Plan (1951-56)	2.1	3.60
2.	Second Plan (1956-61)	4.5	4.21
3.	Third Plan (1961-66)	5.6	2.72
4.	Fourth Plan (1969-74)	5.7	2.05
5.	Fifth Plan (1974-79)	4.4	4.83
6.	Sixth Plan (1980-85)	5.2	5.54
7.	Seventh Plan (1985-90)	5.0	6.02
8.	Eighth Plan (1992-97)	5.6	6.68
9.	Ninth Plan (1997-2002)	6.5	5.5

Note: The growth targets for the first three Plans were set with respect to National Income. In the Fourth Plan it was the Net Domestic Product. In all Plans thereafter, it has been the Gross Domestic Product at factor cost.

TENTH FIVE-YEAR PLAN

The Tenth Five-Year Plan (2002-07) was approved by the National Development Council on 21 December 2002. The Plan has further developed the NDC mandated objectives, of doubling the per capita income in ten years and achieving a growth rate of eight per cent of GDP per annum. Since economic growth is not the only objective, the Plan aims at harnessing the benefits of growth to improve the quality of life of the people by setting the following key targets: Reduction in the poverty ratio from 26 per cent to 21 per cent, by 2007; Decadal Population Growth to reduce from 21.3 per cent in 1991-2001 to 16.2 per cent in 2001-11; Growth in gainful employment, at least, to keep pace with addition to the labour force; All children to be in school by 2003 and all children to complete five years of schooling by 2007;

Reducing gender gaps in literacy and wage rates by 50 per cent; Literacy rate to increase from 65 per cent in 1999-2000, to 75 per cent in 2007; Providing potable drinking water to all villages; Infant Mortality Rate to be reduced from 72 in 1999-2000, to 45 in 2007; Maternal mortality ratio be reduced from four in 1999-2000, to two in 2007; Increase in Forest / Tree cover from 19 per cent in 1999-2000, to 25 per cent in 2007; and Cleaning of major polluted river stretches.

The Tenth Plan has a number of new features, that include, among others, the following :

Firstly, the Plan recognises the rapid growth in the labour force. At current rates of growth and labour intensity in production, India faces the possibility of rising unemployment, which could lead to social unrest. The Tenth Plan therefore aims at creating 50 million job opportunities during the period, by placing special emphasis on employment intensive sectors of agriculture, irrigation, agro-forestry, small and medium enterprises, information and communication technology and other services.

Secondly, the Plan addresses the issue of poverty and the unacceptably low levels of social indicators. Although these have been the objectives in earlier Plans, in the current Plan there are specific monitorable targets, which will need to be attained along with the growth target.

Thirdly, since national targets do not necessarily translate into balanced regional development and the potential and constraints of each State differ vastly, the Tenth Plan has adopted a differential development strategy. For the first time a statewise growth and other monitorable targets have been worked out in consultation with the States to focus better on their own development plans.

Another feature of this Plan is the recognition that Governance is perhaps one of the most important factors for ensuring that the Plan is realised, as envisaged. The Plan has laid down a list of reforms in this connection.

Finally, considering the present market-oriented economy, the Tenth Plan has dwelt at length on the policies that would be necessary and the design of key institutions. The Tenth Plan not only includes a carefully crafted medium-term macro-economic policy stance, both for the Centre and the States, but also lays out the policy and institutional reforms that are required for each sector.

The incremental capital-output ratio (ICOR) of the economy is likely to come down to about 3.6 as against 4.5 during the Ninth Plan. This decline in ICOR is to be achieved mainly through better utilisation of existing capacities and suitable sectoral allocation of capital and its efficient utilisation. The growth target, therefore, would require an investment rate of 28.4 per cent of GDP. This requirement will be met from domestic savings of 26.8 per cent of GDP and external savings of 1.6 per cent. The bulk of the additional domestic savings will have to come from reduction in Government dissavings from –4.5 (2001-02) to –0.5 per cent (2006-07) of GDP.

The Tenth Plan has identified measures to improve efficiency, unleash entrepreneurial energy and promote rapid and sustainable growth. Agriculture is to be the core element of the Tenth Plan. Key reforms for the agriculture sector include: Eliminating inter-state barriers to trade and commerce; Essential Commodities Act to be amended; Amending Agriculture Produce Marketing Act; Liberalising agri-trading, agri-industry and exports; Encouraging contract farming and permitting leasing in and leasing out of agriculture lands; Replacement of various acts dealing with food by one comprehensive ‘Food Act’; Permit futures

trading in all commodities; Removal of restrictions on financing of stocking and trading.

Some other key reform measures include Repeal of SICA, and strengthening bankruptcy and foreclosure laws to facilitate transfer of assets; Reform of labour laws; Policy reforms for village and small scale sectors to improve credit, technology, marketing and skill availability, and a phased dereservation of small scale industries; Early enactment of Electricity Bill; Coal Nationalisation Amendment Bill and Communication Convergence Bill, Abolish restrictions and encourage decontrol of private road transport passenger services and private sector participation in road maintenance; Early adoption of a Civil Aviation Policy, establishment of a regulatory framework for the sector and development of major airports with active private participation. Likewise, the growing regional imbalances are a matter of concern and the Plan aims at promoting a balanced and equitable regional development. The Plan gives a statewise break-up of the targets in order to provide the requisite focus. The need for urgent policy and administrative reforms has also been recognised.

Governance is perhaps one of the most important factors for ensuring that the Plan is realised, as envisaged. Some steps required in this direction are: Improved people's participation, especially through strengthening Panchayat Raj Institutions and urban local bodies; Involvement of civil society, especially voluntary organisations, as partners in development; Enactment of the Right to Information Act; Civil Service reforms for improving transparency, accountability and efficiency; security of tenure, a more equitable system of rewards and punishments; Right sizing both the size and role of Government; Revenue and judicial reforms and using information technology for good governance.

Mid-Term Appraisal of Tenth Plan : The Mid-Term Appraisal of the Tenth Plan was approved by the National Development Council in June 2005. It presented a detailed assessment of the performance of the economy as a whole as well as an assessment of performance in individual sectors in comparison with the Tenth Plan targets. The picture that emerged from the appraisal was mixed. According to it, the economy performed well in many areas and these gains needed to be consolidated but there were some important weaknesses also, which, if not corrected could undermine even the current performance level.

The Average GDP growth for the first three years was 6.5 per cent and it was anticipated that the average growth rate is likely to be below 7 per cent in the Tenth Plan period, well short of the target of 8 per cent. Growth in 2005-06 was projected to accelerate to 7.6 per cent and could accelerate further if the corrective steps were speedily implemented. An important reason for lower growth rate was that investment did not increase in line with available investable resources and a decelerated growth in agriculture sector.

Increase in the price of oil led to serious problems of inflation in mid 2004 but it has since been under control. Private sector investment had revived after a long phase of dormancy. The Tenth Five Year Plan had created a favourable climate for the development of Foreign Direct Investment. The external payment position was comfortable with substantial inflows. The performance of Industrial sector had improved in 2004-05 after a dull record in first two years of Tenth Plan period. The average of first three years was 7 per cent with considerable success in the field of manufacturing sector, pharmaceuticals, biotechnology, automobiles, auto components, etc., other than IT sector.

These positive features were clearly a source of strength, and the aim of policy was to consolidate these gains and accelerate growth in the remaining years of the Tenth Plan. However, a Mid-Term Appraisal for the Tenth Plan also identified some important signs of weaknesses which were a cause for concern like decelerating agriculture growth, infrastructure inadequacies, poor health and education facilities disturbing gender gaps, large rural-urban differences, inequality, poverty, imbalanced regional development, rising unemployment, etc., and needed corrective steps.

The scope for correcting all these deficiencies within the Tenth Plan period is limited. However, it was felt necessary to define a corrective agenda and to initiate the process as quickly as possible. The Mid-Term Appraisal of the Tenth Plan identified many policy initiatives to overcome these weaknesses. Some of the priority areas of action were: investment in irrigation / water management, fertilizer pricing, improving the effectiveness of SSA, National Rural Health Mission, oil pricing, National E-Governance Plan, small-scale industry, etc. These suggestions deserve careful consideration and should form the framework for policy formulation leading to the Eleventh Plan.

AGRICULTURE

Agriculture contributes approximately one-fifth of total gross domestic product (GDP). It provides the means of livelihood to about two-thirds of the country's population. The Sector provides employment to 58.4 per cent of the country's work force and is the single largest private sector occupation. Agriculture accounts for about 10 per cent of the total export earnings and provides raw material to a large number of industries. Besides, the rural areas are the biggest markets for consumer goods, including consumer durables, apart from a major source of domestic savings. Above all, agriculture is the only source of food security for the nation.

Foodgrains production based on 4^{th} Advance Estimates for 2005-06 amounts to 208.30 million tonnes, comprising 195.19 million tonnes of cereals and 13.11 million tonnes of pulses. The production of food grains in 2005-06 marked an increase of 5 per cent as compared to the final production estimated at 2004-05. The production of oilseeds in 2005-06 has been estimated at 27.73 million tonnes, which marked an increase of about 14 per cent over the production of 24.35 million tonnes in 2002-03. Sugarcane production in 2005-06 at 278.38 million tonnes registered an increase of 17 per cent as compared to the level of 237.08 million in 2004-05. Cotton production during the year is estimated at 19.57 million bales of 170 kg each and jute and mesta at 10.74 million bales of 180 kg each.

Milk production during the year 2004-05 was provisionally estimated at 91 million tonnes. India is the highest producer of milk in the world. Fish production was 6.3 million tonnes in 2004-05. Horticulture production (fruits, vegetables, flowers, nuts, plantation crops and spices) was about 144 million tonnes in 2002-03. Fostering rapid and sustained agricultural growth remained a priority agenda of the Government. In order to disseminate agricultural technologies, priority was given for the establishment of agriculture clinics / agri-businesses and Krishi Vigyan Kendras (KVKs). A National Kissan Commission was also constituted to examine the various issues confronting farmers and improving their income. To improve water management through enhanced water use efficiency by the use of drip-and sprinkler-irrigation systems, a new programme of Micro-Irrigation has been initiated. Significant agricultural marketing reforms were initiated. Kissan Call Centres were

established to enable farmers to get expert advice on agriculture related issues and problems. Also, a Krishi Darshan TV Channel and a Krishi Vani Radio Channel were launched with the objective of telecasting programmes addressing area-specific issues and problems of farmers.

IRRIGATION

The country has made impressive strides in irrigation development since the first Plan. The ultimate irrigation potential of the country is assessed as 139.88 million hectare (m.ha.). From the pre-Plan period (before 1951) potential of 22.6 m.ha., the potential created up to Ninth Plan (March 2002) was 93.98 m.ha., with major and medium irrigation projects contributing 36.98 m.ha and minor irrigation contributing 59.02 m.ha. The potential utilised up to end of Ninth Plan is 80.02 m.ha. The total investment in irrigation sector since First Plan to Ninth Plan is Rs 1,55,624.97 crore (at fixed prices). Approved state sector outlay for irrigation in Tenth Plan is Rs 92,143.42 crore which is 15.59 per cent of the over all Plan outlay for Tenth Plan in the state sector. The targeted potential creation for Tenth Plan was 16.743 m.ha. The Mid-Term Appraisal (MTA) of the Tenth Plan has indicated a revised target of 10.5 m.ha. for irrigation (6.5 m.ha. for major and medium irrigation and 4 m.ha. for minor irrigation) and a likely expenditure of 70 per cent of the approved outlay. The recent Bharat Nirman initiative of the Government is for achieving the targets providing assured irrigation to one crore hectare (10 million hectare) by 2009. The future strategy for tackling the challenges of this sector is to enhance investments in irrigation, bridging the gap between the created and utilised potential, empowerment of Water Users Association for collection of water tariff and retention of a part of it for operation and maintenance (O&M) of canal stems, and setting up of water regulators for periodical revision of water tariff to recover at least the O&M costs.

POWER

Under the Power sector, the total installed capacity (including non-utility), which was only 2,301 MW in 1950, increased to 1,43,772 MW (including non-utility of 19,485 MW) by the end of March 2005. Under the rural electrification programme, about 4.38 lakh villages had been electrified out of 5.94 lakh villages (as per 2001 Census) by the end of March 2005, which is 78.8 per cent.

INDUSTRY

In order to achieve a doubling of per capita income over the next decade, the Tenth Plan targets a Gross Domestic Product (GDP) growth rate of eight per cent per annum. The corresponding growth target for the industrial sector is 10 per cent. This represents a major step-up in view of the less than seven per cent growth during the last decade. Presently, Indian Industry, especially the manufacturing sector, is recording a consistently high growth record. That this performance is with lower protection rate shows robustness of Indian Industry, particularly automobile / auto components and pharmaceutical sub-sectors.

For sustaining the pace of growth and investment, several initiatives have been launched for modernising / technology upgradation, reducing transaction cost, increased export thrust, so as to enhance its global competitiveness and achieve balanced regional development. For example, in the Industry and Trade sectors, a number of initiatives / schemes have been launched in order to reduce transaction cost such as, Industrial Infrastructure Upgradation Scheme (IIUS) and Modernisation

of Patent Offices, etc., by Department of Industrial Policy and Promotion. Further, in order to give export thrust, Department of Commerce has launched major initiatives such as Assistance to States for Infrastructure Development for Exports (ASIDE), Market Access Initiatives (MAI), Special Economic Zones (SEZs) Policy, Modernisation of Director General of Foreign Trade (DGFT), etc. For meeting the objectives of balanced industrial development, industrial policy packages have been announced for special category states of Uttaranchal, Himachal Pradesh, J & K, and North East States. Social security issues have been addressed through insurance cover for workers in handloom, agro and rural industrial and processed marine product sectors. For specially addressing the requirement of Textile Industry, being one of the major employment intensive sector, special schemes / packages were introduced such as Technology Upgradation Funds Scheme (TUFS), which is expected to improve the access for decentralised powerloom sector to Technology Upgradation Fund. The Government of India also approved a capital subsidy of 10 per cent benchmarked processing machinery under TUFS for a period of one year over and above the 5 per cent interest reimbursement, considering the fact that processing units are capital intensive and have a longer gestation period to break even and become financially viable. Like-wise, sector oriented intervention has been made by way of launching of a new scheme titled 'Integrated Development of Leather Sector' by DIPP aimed at enhancing global share of leather exports.

The implementation of National Automotive and R&D Infrastructure Project (NATRIP) to set up a world class infrastructure to test vehicles and components has commenced. The first phase of project involving plan funding of Rs. 430 crore will be completed by the end of 10th Plan.

In March 2006 the National Manufacturing Competitiveness Council brought out a document titled 'The National Strategy for Manufacturing'. Setting up of a High Level Committee on Manufacturing (HLCM) under the Chairmanship of Hon'ble Prime Minister has been an important development. The first meeting of the HLCM took place on 04 August 2006 when the National Strategy for Manufacturing (NSM) was adopted. The Committee inter-alia would engage in suggesting and reviewing implementation of National Manufacturing Initiative for achieving a sustained growth of 12 per cent in manufacturing.

In 2004, the Government constituted Board for Reconstruction of Public Sector Enterprises (BRPSE) to address the problems relating to strengthening, modernising, reviving and restructuring of Public Sector Enterprises. Till December 2005, the Board has considered the proposals of 33 cases of sick PSEs. The Government has taken decisions of revival / restructuring of specific Public Sector Enterprises based on these recommendations.

Besides the above, other major highlights in the Industry sector included the following: (i) Inducing the States to evolve Industrial Policy and Plans away from direct subsidy and with greater emphasis on enabling investor-friendly climate / efficient infrastructure; (ii) A principled stand has been evolved with regard to VRS, which is not funded through the Plan; (iii) Review of MOU Systems for Central Public Sector Undertakings (CPSEs); (iv) Initiating Evaluation of Growth Centre Scheme through Programme Evaluation Organisation (PEO); (v) Institutionalised Quarterly Performance Review (QPR) Mechanism resulting in more effective Planning Resource Allocation; (vi) Experience sharing between States and replication of good ideas / best practices; (vii) Acting as a facilitator towards identification of

frontier technologies e.g., Nano Technology, Information and Communication Technologies (ICT) and lean manufacturing for industrial applications; and (viii) Global Competitiveness — a new paradigm evolved in the manufacturing sector as is evident from the performance of manufacturing sector and exports.

The rate of growth of industrial sector as measured in terms of Index of Industrial Production (IIP) during 2005-06 was 8.1 per cent compared to a growth of 8.4 per cent in the corresponding period of 2004-05. The manufacturing sector having a share of 79.36 per cent in the index of industrial production recorded a growth of 9.1 per cent in 2005-06 as compared to 9.2 per cent in 2004-05.

With respect of use-based classification of industries, the growth rate in the capital sector in 2005-06 at 15.8 per cent indicated a substantial improvement over the growth of 13.9 per cent during the last year. Consumer goods, both durable and non-durable segments, also recorded improved performance with a double-digit growth in the last two years. The turn-around in consumer durables since 2003-04 continued. In 2005-06, growth rate of basic goods remained at 6.6 per cent which is higher than that of 2004-05.

MINERAL SECTOR

Recognising the need and to further improve the investment climate for mining in the country, the Planning Commission as constituted a High Level Committee on 14 September 2005 under the Chairmanship of Shri Anwarul Hoda, Member, Planning Commission to review the National Mineral Policy. The terms of reference of the Committee are : (i) to review the National Mineral Policy 1993 and the Mines and Minerals Development and Regulation (MMDR) Act, 1957 and suggest changes needed for encouraging investment in public and private sector in exploration and exploitation of minerals, (ii) to review the existing procedures for granting RP / PL / ML and suggest ways for their streamlining and simplification, (iii) to review the procedures for according clearance to mineral exploration and mining projects under Forest (conservation) and Environment (Protection) Act 1986, and suggest ways for speeding them up, (iv) to prioritise the critical infrastructure needs of the Indian mining sector and make recommendations on ways to facilitate investment to meet these needs, (v) to examine the implications of the policy of mineral rich States to make value addition within the State a condition for grant of mineral concession and make appropriate recommendations in this regard, (vi) to examine ways of augmenting State revenues from the mineral sector and (vii) to examine ways of augmenting State revenues from the mineral sector and (vii) to examine any other issue relevant to stimulating investment flows and inducting state-of-the-art technology into the sector. The report of the committee is under finalisation.

Concept of zero based budgeting was introduced in the Annual Plan 2002-03 (the first year of the Tenth Plan) and accordingly organisations such as Geological Survey of India (GSI) and Indian Bureau of Mines (IBM) have categorised their activities as per zero based budgeting and the monitoring of the schemes in terms of physical and financial targets and achievements is being done through Quarterly Performance Review (QPR) / Half-Yearly Performance Review (HPR) in the Planning Commission.

Keeping in view the goals and objectives outlined in the National Common Minimum Programme of the Government and priorities emerging from Mid-Term appraisal of the Tenth Five Year Plan, a plan outlay of Rs 883.69 crore has been

made for the Mineral sector in AP 2006-07, which is comprised of Rs 250 crore (GBS) and Rs 633.69 crore (IEBR). Of the total outlay, an allocation of Rs 18.95 crore has been earmarked for the North-East Region (NER).

EDUCATION

Education is the most crucial investment in human development. Over the decades, considerable progress has been achieved in terms of literacy, school enrolment, network of schools and spread of institutions of higher education including technical education. The literacy rate has gone up from 18.43 per cent in 1951 to 64.84 per cent in 2001. The decade of 1990s has been a watershed for basic education as the Census 2001 showed 12.63 percentage point increase in literacy, the highest since 1951. The Gross Enrolment ratio 12.63 percentage point increase in literacy, the highest since 1951. The Gross Enrolment Ratio (GER) at primary level has increased from 42.6 per cent in 1950-51 to 98.3 per cent in 2003-04. Similarly, for upper primary, it has gone up from 12.7 per cent to 62.5 per cent for the corresponding period.

The number of primary schools has increased by more than three folds from 2.10 lakh to about 7.12 lakh and that for upper primary schools, 19 times from 13,600 to about 2.62 lakh. As per the Provisional results of Seventh All India Educational Survey (2002), about 87 per cent of the 12.31 lakh habitations in the country were served with primary schools within a distance of one kilometer. In habitations not covered by regular schools, EGS / AIE centres have been setup and access to schooling has been almost universalised in all States / UTs. The total number of Elementary teachers increased from 6.24 lakh in 1950-51 to 36.89 lakh in 2003-04, i.e., registering an increase of more than five times. The number of female teachers increased from 0.95 lakh to 14.88 lakh.

However, there are still some gaps. The dropout rate at elementary level has declined from 78.3 in 1960-61 to 52.32 per cent in 2003-04, however, it is still high. The quality of education too requires improvement and there are gender, social and regional disparities. Besides, there are various systemic issues like inadequate infrastructure, high teacher vacancies / absenteeism and poor laboratory and library facilities. The number of out-of-school children has reduced steadily since 2002-03. This number came down to 1.35 crore in November 2005. States and UTs have reported that by March 2006 this number has further reduced to 95 lakh only.

The thrust areas in the Ninth Five Year Plan included Universalisation of Elementary Education (UEE), full adult literacy, raising the quality of education at all levels and improving learner achievement. Elementary education was given the highest priority reiterating the country's strong resolve to achieve the goal of Education for All (EFA) during the Plan period. This was sought to be achieved through several measures including amendment to the Constitution of India making elementary education a fundamental right, decentralisation of planning, supervision and management of education through local bodies, social mobilisation for adult literacy, developing a stronger partnership with NGOs and provision of opportunities for adult literacy, developing a stronger partnership with NGOs and provision of opportunities for non-formal and alternative education for out-of-school children in the most backward areas and for the, as yet, unreached segments of the population. The major initiatives taken to bring about quantitative and qualitative improvement in elementary education include Operation Black Board, Non-formal Education Programme, Teacher's Education, District Primary Education Programme (DPEP), National Programme of Nutritional Support to Children of Primary Education popularly known as Mid-Day Meal Scheme.

Against this backdrop, the Tenth Plan had set the crucial Monitorable Targets that aims at all children in schools by 2003; all children to complete five years of schooling by 2007, reduction in the gender gap in literacy by at least 50 per cent and increase in the literacy rate by 75 per cent.

The Tenth Plan strategy for achieving UEE has been designed with a holistic approach as the existing policies and programmes are either for specific target groups / regions (Lok Jumbish) or aspects (Operation Blackboard, which mainly targeted the school infrastructure). An all-comprehensive programme, Sarva Shiksha Abhiyan (SSA), launched in 2000-01 covering the entire country, will be the main vehicle for achieving the goals of UEE. The scheme has a special focus on educational needs of girls, economically and socially deprived segments and other children in difficult circumstances. The programme is implemented in a mission mode with the Prime Minister heading the National Mission for SSA.

The involvement of the community is made more systematic by involving the Panchayati Raj Institutions (PRIs) and urban local bodies. Further down the hierarchy, the Village Education Committees (VEC), Mother-Teacher Associations (MTA) and Parent-Teacher Associations (PTA) would have a formal role in the management of schools in the village. Efforts are also made for the social mobilisation of local communities for adult literacy campaigns and for the promotion of primary education. Community-ownership of the school system is a key element in SSA.

The National Programme of Nutritional Support to Primary Education (NP-NSPE) or the Mid-Day Meal (MDM) Scheme, was launched on 15 August 1995 to give a boost to universal primary education by increasing enrolment, attendance and retention and improving the nutritional status of children in primary classes in Government, local body and government-aided schools. The programme has been extended to children studying under the Education Guarantee Scheme and in other Alternative Innovative Education Centres. The Programme has been universalised at Primary level from 1 September 2004 and covers about 11 crore children. This scheme is mostly funded by the Central Government.

The National Policy on Education (NPE, 1986) as modified in 1992 was a landmark in the field of policy on women's education in that it recognised the need to redress traditional gender imbalances in educational access and achievement. The subsequent Plan of Action, 1992 stated that it was impossible to achieve UEE unless concerted efforts were made to reach out to the girl child. Specific steps taken so far in this direction include mandatory recruitment of at least 50 per cent female teachers under Operation Black Board, a separate budget for girls' centres under Non-Formal Education Scheme, EGS schools, bridge courses, back to school camps, residential camps for out of school girls, Lok Jumbish (Rajasthan) to bridge the gender gap in primary education, DPEP in low female literacy districts, Mahila Sanghas under Mahila Samkhya Scheme for women's empowerment, a National Programme for Education for Girls at Elementary Level (NPEGEL) a component of SSA, and residential schools under Kasturba Gandhi Swatantrata Balika Vidyalaya (KGBV), which specifically target the girl child in educationally backward districts / blocks.

Under Adult Education, Total Literacy Campaign (TLC) is the principal strategy adopted by the National Literacy Mission (NLM) for eradication of illiteracy in the country. The literacy campaigns are area specific, time-bound and are developed through voluntary, cost-effective and outcome-oriented methods. The

NLM aims to provide functional literacy to persons in the age group of 15-35 years to threshold sustainable level of 75 per cent by the year 2007. So far, out of 600 districts in the country, 128 had been covered under Total Literacy Campaign, 164 under Post Literacy Programme and 305 under Continuing Education programme. As such, 597 districts had been covered under these schemes. According to the Census 2001, literacy had increased from 52.21 per cent in 1991 to 64.84 per cent in 2001. Female literacy, which was 39.29 per cent in 1991, has increased by 14.38 percentage points to 53.67 per cent in 2001 whereas, the male literacy rate, which was 64.13 per cent in 1991 has risen by 11.13 percentage points to 75.26 per cent in 2001. Thus, female literacy has increased at a faster rate than that for males. Special emphasis has been laid by NLM on women's participation (60 per cent) in Literacy programmes.

Secondary education serves as a bridge between elementary and higher education and prepares young persons between the age group of 14-18 for entry into higher education.

The number of secondary schools in India increased from 7,416 in 1950-51 to 1,45,962 in 2003-04. The major thrust in the Tenth Five Year Plan thus, is to meet the increased demand for secondary education. The Plan will also focus on a revision of curricula with emphasis on vocationalisation and employment-oriented courses, expansion and diversification of the open learning system, re-organisation of teacher training and greater use of new information and communication technologies, particularly computers.

The Higher education system has seen a seventeen-fold increase in the number of universities and 35-fold increase in the number of colleges in comparison to the number at the time of Independence. During the year 2005-06 (as on 31 December 2005) there were 335 Universities of which 215 were State Universities, 20 Central Universities, 100 Deemed to be Universities, apart from five institutions established under State Legislation Acts and 13 institutes of national importance established by Central legislation. There were nearly 17625 colleges including 1849 womens' colleges in the country. At the beginning of year 2005-06, the total number of students enrolled in the formal system of education in universities and colleges has been 104.81 lakh, 13.88 lakh in university departments and 90.93 lakh in the affiliated colleges.

The number of technical institutions has shown a phenomenal increase. As compared to 562 degree level institution in 1997-98, the total number of approved engineering colleges in 2005 was 1478. The intake capacity increased from 1,34,298 in 1997-98 to 5,08,595 in 2005-06.

HEALTH AND FAMILY WELFARE

Improvement in the health and nutritional status of the population has been one of the major thrust areas for the social development programmes of the country. Over the last five decades, India has built up a vast health infrastructure and manpower primary, secondary and tertiary care in government, voluntary and private sectors. Improvement in access to healthcare services combined with technological advances in a field of health has resulted in substantial improvement in health indices of the population and a steep decline in mortality. However, there are wide intra-regional and intra-state disparites in health service coverage.

Some of the factors responsible for the poor functional status of the health system are : (i) Mismatch between personnel and infrastructure; (ii) Lack of

Continuing Medical Education (CME) programmes for orientation and skill up-gradation of the personnel; (iii) Lack of appropriate functional referral system; and (iv) Absence of well established linkages between different components of the system.

Some of the major initiatives taken in the Health Sector are : (i) Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) has been initiated with the avowed objective of providing specialty and super-specialty medical care in different States. The imbalances in the availability of tertiary care hospitals / medical colleges is also sought to be mitigated by ensuring high quality services to the uncatered areas. The concomitant thrust of the programme is to enhance the quality of medical services as well. Under the programme, 6 AIIMS-like Institutions are proposed to be established in the States of Bihar, Chhattisgarh, Madhya Pradesh, Orissa, Rajasthan and Uttaranchal. One Medical College each in the States of Jharkhand, Tamil Nadu, West Bengal, Kerala, Karnataka, Maharashtra, Gujarat and UP and two medical colleges each in Andhra Pradesh and J&K will also be upgraded to the level and standard of AIIMS. (i) With a view to improving the Disease Surveillance Programme to ensure early detection of warning signals of impending outbreaks, a comprehensive Disease Surveillance Programme at the district level is being implemented. It would facilitate the study of the disease patterns including new emerging diseases and would provide data to monitor programmes of disease control and help in optimising allocation of resources; (ii) Hospital Infection Control and Waste Management has been incorporated as an essential component of the health delivery to co-ordinate and provide policy guidelines in this regard; (iii) Empowered Action Group (EAG)-to bolster the efforts in improving the health delivery systems in the backward states which manifest high fertility and mortality rates, an Empowered Action Group has been set up in the Ministry of Health and Family Welfare. The States included under the programme are: Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Orissa, Uttaranchal, Jharkhand and Chhattisgarh. The underlying objective is to promote an environment for provision of quality services particularly in terms of demographic indices. The main activities undertaken are : capacity building and to ensure single window clearance point for policy decisions and provision of special assistance. Subsequent to the launch of National Rural Health Mission (NRM) & the RCH II programme (Reproductive Health Programme), the EAG scheme (Empowered Action Group) has been subsumed under NRHM.

The recently launched National Rural Health Mission (2005-12) (launched on 12 April 2005) seeks to provide effective healthcare to rural population throughout the country with special focus on 18 States, which have weak public health indicators and / or weak infrastructure. These 18 States are Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Manipur, Mizoram, Meghalaya, Madhya Pradesh, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Uttaranchal and Uttar Pradesh.

The Mission is an articulation of the commitment of the Government to raise public spending on health from 0.9 per cent of GDP to 2-3 per cent of GDP. It aims to undertake architectural correction of the health system to enable it to effectively handle increased allocations as promised under the National Common Minimum Programme and promote policies that strengthen public health management and service delivery in the country.

It has as its key components provision of a female health activist in each village; a village health plan prepared through a local team headed by the Health and

Sanitation Committee of the Panchayat; strengthening of the rural hospital for effective curative care and made measurable and accountable to the community through Indian Public Health Standards (IPHS); and integration of vertical health and family welfare programme and funds for optimal utilisation of funds and infrastructure and strengthening delivery of primary healthcare. It seeks to revitalise local health traditions and mainstream AYUSH into the public health system. It aims at effective integration of health concerns with determinants of health like sanitation and hygiene, nutrition and safe drinking water through a District Plan for Health.

The RCH II (2005-09) is a key component of NRHM. It is an integrated vision on maternal health, new born / child health, RT / STI and family planning within a comprehensive approach involving both public and private / NGO sectors. It will support the paradigm shift in India's Family Welfare programme by promoting States' ownership with pro-poor focus. It encompasses programmes in rural and urban areas and addresses a significant proportion of mortality and morbidity burden among women and children, and also contributes to strengthening of public health systems. Thus, it includes many of the key strategies proposed under NRHM and contributes to several of its key outcomes.

In order to reduce the magnitude of under-nutrition in adolescent girls and pregnant and lactating women, a pilot project was launched in 51 districts of the country. Two backward districts in each of the major States and most populous districts have been taken up under this programme. The scheme envisages provision of free-of-cost foodgrains to the identified families. An amount of Rs 141 crore was earmarked under this programme in the year 2004-05. The programme has been revived and the Ministry of Women and Child Development has obtained Cabinet approval for implementing the scheme in 2005-06 and 2006-07.

NATIONAL POPULATION POLICY, 2000

The immediate objective of the National Population Policy, 2000 is to address the unmet needs of contraception, health infrastructure and health personnel and to provide integrated service delivery for basic reproductive and child health care. The medium-term objective is to bring the Total Fertility Rate to replacement level by 2010 through vigorous implementation of inter-sectoral operational strategies. The long-term objective is to achieve population stabilisation by 2045, at a level consistent with the requirements of sustainable economic growth, social development and environment protection.

NATIONAL COMMISSION ON POPULATION

The National Commission on Population was constituted on 11 May 2000 under the Chairmanship of the Prime Minister of India to provide overall guidance for population stabilisation by promoting synergy between demographic, educational, environmental and developmental programmes.

The National Commission on Population has been re-located from Planning Commission to the Ministry of Health and Family Welfare for ensuring comprehensive and multisectoral coordination of Planning and implementation between health and family welfare on the one hand and the schemes of the related Departments on the other. The Commission has since been reconstituted with 40 members, the first meeting of which was held on 23 July 2005. Five Expert Groups have been constituted for studying the population profile of the States of Bihar,

Uttar Pradesh, Rajasthan, Madhya Pradesh and Orissa in order to identify weaknesses in the health delivery systems and to suggest measures to improve the health and demographic status of these States.

PANCHAYATI RAJ INSTITUTIONS

The enactment of the 73rd Constitutional Amendment Act, 1992 marks a new era in the federal democratic set-up of the country bestowing a constitutional status to the Panchyati Raj Institutions (PRIs). Pursuant to the Act, barring the States of Jammu and Kashmir, the National Capital Territory of Delhi and Uttaranchal, all the States have enacted the necessary legislation for setting up of strong, viable and responsible panchayats at different levels in their respective States / Union Territories. In all the States, panchayats have been constituted according to new laws except in the States of Arunachal Pradesh, NCT of Delhi and Pondicherry.

The Amendment Act contains provisions for devolution of powers and responsibilities to the panchayats both for preparation of Plans for economic development and social justice and for implementation, in relation to 29 subjects listed in the Eleventh Schedule of the Constitution. Pursuant to this, the States are expected to devolve administrative and financial powers alongwith the functionaries in respect to these 29 subjects to the PRIs. The State Government's are in the process of transferring these subjects to the PRIs. Recognising the need for taking concrete action to empower PRIs, the Government has set up an "Empowered Sub-Committee of National Development Council on Financial and Administrative Empowerment of PRIs" to look into the whole gamut of issues relocated to devolution of powers, functions and financial resources to the PRIs.

At present, panchayats receive funds from three sources, namely: (i) local body grants as recommended by the Central Finance Commission, (ii) funds for implementation of centrally-sponsored schemes; and (iii) funds released by State Governments on the recommendations of State Finance Commissions. Further, States are required to enact laws to enable Panchayats to raise tax and non-tax revenue so as to make them effective institutions.

The State Governments are required to constitute District Planning Committees (DPCs) as envisaged under Article 243 ZD of the Constitution at the district level to facilitate the process of decentralised planning by consolidating the development Plans prepared by the panchayats and municipalities for the district as a whole covering both rural and urban areas.

According to Article 243 (A) of the Constitution, the Gram Sabha may exercise such powers and perform such functions at the village level as the legislature of a State may, by law provide. Most State Acts have vested in the Gram Sabha responsibilities and functions such as : (i) supervising and monitoring the functioning of the Gram Panchayats; (ii) approval of plans and selection of schemes, beneficiaries and locations; and (iii) mobilisation of voluntary labour contributions in cash or kind for community welfare programmes and to promote unity and harmony among all sections of society. Of late, however, as a result of several initiatives of the Central Government in partnership with State Governments a view has emerged which favours strengthening of Gram Sabhas as the bedrock of democracy at the grass-roots level.

The States have been requested to take the following measures to empower the Gram Sabha : (i) to ensure that Gram Sabhas should meet at least once in each quarter preferably on Republic Day, Labour Day, Independence Day and Gandhi

Jayanti; (ii) vest powers in Gram Sabhas giving them the powers of ownership, management and control over natural resources, as envisaged under the provision of the Panchayats (Extension to the Scheduled Areas) Act, 1996; (iii) Gram Sabhas should have full powers for determining the priorities for various programmes; (iv) Panchayats should be made accountable to the Gram Sabha in unequivocal terms; (v) members of Gram Sabhas should be made aware of their powers and responsibilities and steps should be taken to ensure mass participation, particularly of SCs / STs and women; and (vi) A Gram Sabhas should have the powers to evolve its own procedures to carry out social audit of development programmes.

The provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 extends Panchayats to the tribal areas of nine States viz, Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Maharashtra, Madhya Pradesh, Orissa and Rajasthan. It strives to enable a tribal society to assume control over their own destiny to preserve and conserve their traditional rights over natural resources.

SOCIAL WELFARE

The Ministry of Social Justice and Empowerment in coordination with the Planning Commission and State Governments has been working towards the mainstreaming of the disadvantaged and marginalised sections of the society. The objective is to empower the target groups through their educational, economic and social development and to bring them on par with rest of the society.

The Social Welfare Division continued its efforts towards fulfilling the Tenth Plan commitments of: (i) Empowering Persons with Disabilities, (loco-motor, visual, hearing, speech and mental disabilities); (ii) Reforming the Social Deviants who come in conflict with law (juvenile delinquents / vagrants, drug addicts, alcoholics, sex workers, beggars, etc.); and (iii) Caring for the Other Disadvantaged (the aged children in distress such as Street Children, orphaned / abandoned children, etc.), through effective coordination with the Ministry of Social Justice and Empowerment and other related Ministries and Departments / State Governments / UTs to ensure the efficient implementation of various policies and programmes for these target groups.

Persons with Disabilities (PWD) are defined as those suffering from four types of disabilities viz., Visual, loco-motor, hearing and speech and mental disabilities. In the Ninth Plan (1992-97), the earlier paradigm shift in approach from ''welfare" to development was moved further to "empowerment" which is more holistic by including both the welfare and development perspective. The major thrust in the Tenth Plan has been to consolidate and strengthen the various programmes through coordinated efforts and innovative interventions in attending to the special problems and needs of these disadvantaged groups. One of the thrust areas during the Tenth Plan has been to prepare disabled-friendly policies to create a hurdle-free environment for the person with disabilities.

To optimise the use of available resources and achieve synergy and convergence in functioning, the Planning Commission has taken up an in-depth exercise on the rationalisation, convergence, merging and weeding out of the on-going schemes in the social welfare sector being implemented by the Ministry of Social Justice and Empowerment. The outcome of this exercise was discussed in the Core Committee on Zero Based Budgeting of Central and Centrally-Sponsored Schemes. In accordance with the decisions of the Core Committee, the 39 schemes (36 CS and

three CSS) implemented during the Ninth Plan, have rationally been reduced to only 16 schemes (15 CS + one CSS) and retained in the Tenth Plan.

There are 10 CS ongoing schemes for the welfare of the disabled during the Tenth Plan with an outlay of Rs 1,469 crore.

There are 5 CSS +1 CSS Scheme for Social Defence and other disadvantaged groups with an outlay of Rs 535 crore. The total outlay for the Tenth Plan for the Social Welfare Sector has been kept at Rs 2,004 crore.

Recognising the complementing / supporting role played by the voluntary organisations in the welfare sector, majority of the schemes / programmes have been implemented with full or partial involvement of the NGOs.

Tribal Development Sector : The Government continues its efforts for the welfare and development of Scheduled Tribes, who constitute eight per cent of the total population of the country. Of these, 1.8 million belong to the Primitive Tribal Groups (PTGs).

The objective of the Tenth Plan and Annual Plan 2006-07 is for empowering scheduled tribes through a three-pronged strategy of Social Empowerment, Economic Empowerment and Social Justice. During the Tenth Five-Year Plan, an amount of Rs 5,754 crore was approved as plan outlay and for Annual Plan 2006-07, Rs 1,760.19 crore has been proposed.

The Tribal Sub-Plan strategy adopted during the Fifth Plan is being implemented by the Centre as well as the State Governments through various schemes. In addition to Special Central Assistance to the Tribal Sub-Plan, Grants are also being provided to the State Governments to implement specific schemes for the welfare and development of Scheduled Tribes.

The National Scheduled Tribes Finance and Development Corporation has been set up to give focused attention to the economic development of tribals. Rs 30 crore has been allocated for Annual Plan 2006-07.

Socially Disadvantaged Groups : The process of empowering the disadvantaged groups of SCs, OBCs and Minorities will continue in more intensified and effective manner in the Annual Plan 2006-07. The SCs account for 166.63 million, representing 16.2 per cent and Minorities numbering about 188.9 million, representing 18.4 per cent of the country's population (estimated) in 2001. Social Empowerment amongst the disadvantaged groups is being carried out through reduction programmes and through removal of prevailing inequalities, disparities besides providing access to other Basic Minimum Services. Educational development is being carried out through the implementation of schemes like Post and Pre-matric Scholarships, Hostels and allied Coaching Schemes.

Special Central Assistance (SCA) to Special Component Plan (SCP) for SCs is being extended as 100 per cent grant to States / UTs to fill the critical gaps and missing inputs in family oriented income generating schemes with supporting infrastructure development having focus on BPL families. National Finance and Development Corporations for weaker sections have been set up exclusively at the national level for the disadvantaged groups for micro-credit, employment, income generating schemes and skill upgradation, These include: (i) National Scheduled Caste Finance and Development Corporation; (ii) National Safai Karamchari Finance and Development Corporation; (iii) National Minorities Development and Finance

Corporation; and (iv) National Backward Classes Finance and Development Corporation besides the State level Scheduled Castes Development Corporations.

URBAN DEVELOPMENT

Cities everywhere are recognised as contributing substantially to economic, social, educational and infrastructural needs of the country. While they offer a higher standard of amenities to city-dwellers, they also have an important role in ensuring a range of services to the rural hinterland creating demand for rural output as well as providing avenues for access to inputs. Towns and cities act as nodal centres for services in marketing, health-care, education, and also in opening a window to the larger world. The 74th Constitutional Amendment, with its provisions to decentralise the responsibility for urban management, is intended to increase the participation of the people and accountability in the administration. However, the challenge to be met in the Tenth Plan period is to assist the elected bodies to grow organisationally to fulfill the demands of urban residents for a quality life at par with world standards. Substantial work has already been done to upgrade the urban infrastructure and urban development authorities have acquired considerable skills in planning and executing projects. Programmes such as the Mega City project for five selected cities, the Integrated Development of Small and Medium Towns (IDSMT), and the Accelerated Urban Water Supply Programme (AUWSP), etc., have shown varying degrees of success in meeting some of the urban needs. The parastatals and development authorities are designed to play a supportive role to the elected bodies rather than taking over the functions which properly belong to the Urban Local Bodies (ULBs).

In order to augment the financial position of ULBs, reforms are being introduced through introduction of accrual-based double entry system of accounting, e-governance, property tax reforms, levy of reasonable user charge, etc., by ULBs. To bridge the gap between requirement of funds by the ULBs and available financial resources, the Twelfth Finance Commission has recommended Rs 5,000 crore for local bodies as grants-in-aid for the period from 2005 to 2010, out of which Rs 2,500 crore is specifically earmarked for solid waste management in ULBs. At the State level to improve the financial position of the ULBs, actions have been taken to implement the recommendations of the State Finance Commission through taxes, duties, fees, etc., assigned to ULBs and distribution of their proceeds between the State and the ULBs.

New Reform linked approach to Urban Development : The Jawahar Lal Nehru National Urban Renewal Mission (NURM) has been established to provide reform linked Central assistance for development of infrastructure in select 63 cities and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) for other than mission cities. States will be provided ACA grant in various proportions of project cost. The mission would take care of urban infrastructure projects, including water supply, sanitation, sewerage, solid waste management, road network, urban transport and redevelopment of inner city areas.

The main thrusts of the revised strategy is to link asset creation with asset management, improvement in service delivery, improvement of financial soundness of Urban Local Bodies (ULBs) leading to overall improvement in urban infrastructure and governance. In this improved environment, public-private participation models for provisioning of various services would also become feasible. To achieve this objective, State Governments, Urban Local Bodies and parastatal agencies will be

required to accept implementation of an agenda of reforms. The proposed reforms both at State and Urban Local Bodies and parastatal agencies will be required to accept implementation of an agenda of reforms. The proposed reforms both at State and Urban Local Bodies levels shall broadly fall into two categories : (i) Mandatory reforms, (ii) Optional reforms.

Some mandatory and optional reforms at State / ULBs levels are: (i) Adoption of modern, accrual based double entry system of accounting, (ii) Introduction of system of E-Governance in housing, IT applications like GIS and MIS for various services. (iii) Reforms of Property Tax with GIS applications, (iv) Levy of reasonable user charges by ULBs to cover full cost of O&M. (v) Implementation of decentralisation measures as envisaged in 74th Constitutional Amendment Act. (vi) Repeal of Urban Land Ceilings and Regulation Act. (vii) Reform of Rent Control Laws balancing the interests of landlords and tenants. (viii) Rationalisation of Stamp Duty to bring it down to no more than 5 per cent within the next five years. (ix) Enactment of Public Disclosure Law to ensure preparation of medium-term fiscal plan of ULBs and release of quarterly performance information to all stakeholders. (x) Revision of bye-laws to streamline the approval process for construction of buildings, development of sites, etc. (xi) Introduction of Property Title Certification System in ULBs. (xii) Introduction of computerised process of registration of land and property. (xiii) Encouraging Public / Private Partnership.

In order to develop a database at town levels, a new scheme, National Urban Information System (NUIS) has been designed. The NUIS comprises two major sub-components viz. (a) Urban Spatial Information System Scheme (USIS), i.e., generation of digital maps through satellite / aerial survey, to meet spatial (maps / images) data / information requirements of urban planning for routine functions and (b) National Urban Databank and Indicators (NUDB&I) to develop town level urban database to support development of indices.

URBAN TRANSPORT

Increasing urban population coupled with increased city size has led to a rapid growth in the urban travel demand. Rapid growth in the use of personal motor vehicles has resulted in increased congestion, air pollution, higher incidence of accidents as well as an increased consumption of petroleum products. Significant improvement in public transport are a critical requirement for improving mobility in urban areas and thereby facilitating economic growth. Such improved mobility would also have a beneficial impact on the urban poor by improving their access to employment, education and health care. For urban planning it is necessary to give attention to an appropriate policy for transportation and traffic plans for every urban agglomeration. For pursuing objectives in the area, it is proposed to include the requirement in the NURM for each city to have an integrated plan and also to set up an expert body.

A National Urban Transport Policy has been drafted for the first time. This policy envisages integrated land use and transport planning, significant improvements in public transport, encouragement of non-motorised modes of travel, provision of adequate parking spaces as also a comprehensive set of measures for capacity building in urban transport planning.

While the only major project under implementation at present is the Delhi Mass Rapid Transit System, a number of other proposals have been posed for consideration.

The Delhi MRTS is being funded through equity from the Government of India and the GNCTD, as well as soft loan assistance from JBIC. The funds are being made available as pass through assistance, which is included in the budgetary resources of the Ministry of Urban Development. Phase-I of Delhi MRTS has been completed and Phase-II is under active implementation.

TELECOM SECTOR

The predominant role of the Telecom sector in the rapid social and economic development has been recognised the world-over. The telecom sector in India has undergone a series of changes and institutional reforms since 1991. The new Telecom Policy, 1999 has laid down the basic framework for the future development and growth of the Telecom sector in the country. Following this approach, the major objectives envisaged in the Tenth Five Year plan include: (i) Affordable and effective communication facilities to all citizens, (ii) Provision of universal service to all uncovered areas including rural areas, (iii) Building a modern and efficient telecommunication infrastructure to meet the convergence of Telecom, IT and Media, (iv) Transformation of the telecommunication sector to a greater competitive environment providing equal opportunities and level playing field for all players, (v) Strengthening Research and Development efforts in the country, (vi) Achieving efficiency and transparency in the spectrum management, (vii) Protecting the defence and security interests of the country, (viii) Enabling Indian telecom companies to become truly global players.

Towards fulfillment of these objectives, India's more than 125 million telephone network is one of the largest networks in the world, which continues to grow at a blistering pace. The higher growth rate has continued during the first three quarters of the year 2005-06 and showed a growth rate of 35 per cent between December 2004 and December 2005. The total number of phones has reached 125.8 million as on 31 December 2005. The performance during the year has been so impressive that the average monthly addition crossed to 3 million lines. During 2005-06, 274.15 lakh new connections (50.90 lakh by BSNL & MTNL and 223.25 lakh by private sector were provided).

The private sector has continued its dynamism and entrepreneurial spirit to play a significant role in the growth of telecom sector. The share of private sector in the total telephones has increased from 47 per cent as on 31 March 2005 to 55 per cent as on 31 December 2005. Of the 274.15 lakh additional phones provided during 2005-06 the major share, i.e., 223.25 lakh, amounting to more than 81 per cent was provided by the private sector. The preference of subscribers in the urban areas is for wireless telephony and the trend continues. This has now been transformed into a mass consumption service.

Efforts are on to develop rural telephony. Under the Bharat Nirman, all the 66,822 uncovered villages are to be covered by November 2007. Against this target 25,870 uncovered villages have already been covered upto May 2006.

''One India Tariff'' is another important feature introduced from 1 March 2006 under which the customers of BSNL and MTNL can call from one end of India to another at the cost of Rs. 1 per minute, any time of the day to any phone.

POSTAL SECTOR

The Department of Post is one of the largest public sector employers in the country employing more than 5.7 lakh persons equally divided between permanent

employees and extra-departmental employees. It has completed 150 years of its service and has a network of 1.55 lakh post offices. Besides, providing a variety of postal services, the Indian postal system plays, a vital role in the resource mobilisation efforts especially in rural areas. The Tenth Plan aims at making the postal services self-financing by the end of the Plan period. An outlay of Rs 200 crore was approved for the Annual Plan 2004-05.

Computerisation and Networking of Post Offices was the single most important scheme being implemented by the Department during their annual Plan 2004-05. The Department has taken up a number of new initiatives such as Postal Finance Mart, On-line domestic money transmission service, sale of postage stamps and postal stationery by the postman at the doorstep of the customer, thereby bringing the post office closer to people, and also the collection of mail by the postman. Speedpost Gold Service has been introduced between business districts of Delhi and Mumbai in February 2006. This Service assures next day forenoon delivery, automatic refunds in case of delay, electronic proof of delivery on e-mail / SMS and specialised arrangements for collection, transmission and delivery.

INFORMATION TECHNOLOGY

The software and ITES exports from India grew from US$ 12.9 billion in 2003-04 to US $ 17.7 billion in 2004-05. It is estimated that total software and ITES exports from India will exceed US $ 23.4 billion during 2005-06. Software and services exports are estimated to grow at 32 per cent in dollar terms during 2005-06. The Indian software and services exports has grown at a CAGR of 28 per cent during last 5 years. The industries' contribution to national GDP has risen from 1.2 per cent in 1999-2000 to a projected 4.8 per cent during 2005-06.

The total number of IT and ITES-BPO professionals employed in India is estimated to have grown from 2,84,000 in 1999-2000 to 12,87,000 in 2005-06 growing by over 2,30,000 in the last year alone. In addition, the Indian IT-ITES sector is estimated to help create an additional 3 million job opportunities both direct and induced.

INFORMATION AND BROADCASTING

The activities of Information and Broadcasting (I&B) Sector cover three areas, viz., Broadcasting (Doordarshan and All India Radio), Information and Film Sector with the functions of each complementing the other. Many means of communication deployed in the past to reach the large segment of the population either became outdated or underwent radical technological changes, and yet goals like providing the people with development information and wholesome entertainment at a minimal cost, facilitating healthy growth and competition within the sector remained as valid as ever. It is noteworthy that both DD and AIR have made substantial progress in terms of geographical and population coverage. This has necessitated a review of the challenges facing the sector and reworking of priorities for the Tenth Five-Year Plan.

Some of the policy initiatives taken by the Government are, to encourage adoption of alternative technologies that enable increased and improved access to public and private broadcasters at affordable cost for the common man and to allow setting up of Low Power Community Radio Stations in FM mode by local communities including nonprofit organisations such as Universities, NGOs, etc., for educational, cultural and economic development of the respective communities.

Stress has been laid on introducing Special Packages to improve TV and Radio services in J & K and North-East States including Sikkim and Island Territories.

An outlay of Rs 5,130 crore has been approved for the I&B sector with a budgetory support of Rs 2,380 crore for the Tenth Plan.

The Annual Plan (2006-07) outlay for the sector has been kept at Rs 538.00 crore (GBS). The breakup for Broadcasting, Information and Film is Rs 469.77 crore, Rs 27.28 crore and Rs 40.94 crore, respectively. Total Budgetary support for the year 2006-07 is Rs 538.00 crore (GBS) without any IEBR support. During this plan year, an amount of Rs 10.00 crore has been earmarked for providing co-location of facilities to private broadcasters with Prasar Bharati in the field of FM broadcasting. Stress has also been laid on the development of the Children Film Society complex at Hyderabad, scheme of computerisation and modernisation for training and skill development at Satyajit Ray Film Institute, Kolkata, and ICT programme at Song and Drama Division. Enhanced fund have also been provided for the activities. In addition to this a fund of Rs 10.00 crore has been provided to modernise Jyoti Chitraban Film Studio at Guwahati.

TRANSPORT

Transport system in India comprises a number of distinct modes and services, notably railways, roads, road transport, ports, inland water transport, coastal shipping, airports and airlines. Railways and roads are the dominant means of transport carrying more than 95 per cent of the total traffic generated in the country. The transport sector has expanded manifold in the first 50 years of planned development, both in terms of spread and capacity.

Railways : Indian Railways has completed more than 150 years of service to the nation in May 2002. Railways, with a capital base of about Rs 55,000 crore and a network of about 63,000 kms route, is the principal mode of transportation for bulk freight and long distance passenger traffic. The main thrust in the Tenth Plan is on the capacity expansion through modernisation and technological upgradation of railways system, improvement in quality of service, rationalisation of tariff in order to improve the share of rail freight traffic in the total traffic and to improve safety and reliability of railway services.

Given the present growth in GDP of 8 per cent, the Railways are expected to carry about 1100 million tonnes freight traffic by the end of the Eleventh Plan. To sustain this kind of growth, it is essential to have Dedicated Freight Corridors. Therefore, it is decided to have two Dedicated Freight Corridors between Ludhiana and Son Nagar (Eastern Corridor — 1230 km) and between Mumbai (JNPT) and Tuglakabad / Dadri (Western Corridor — 1469 km) to augment the capacity of Indian Railways to handle the large increase in the coming years. These Dedicated Freight Corridors along with the strengthening of feeder routes of Indian Railways will ensure availability of sufficient capacity in the face of rising demand of transport.

Roads : Priority was accorded for improving mobility and accessibility. Providing connectivity to villages and habitations is extremely crucial to realise the objective of accessibility. Providing connectivity to villages and habitations is extremely crucial to realise the objective of accessibility. Hence, necessary priority was accorded by re-phasing the PMGSY whose target was to provide connectivity to habitations with 1000 and above by 2003 and those with a population of 500 and above by 2007 (250 + for hilly and tribal areas) — to achieve the Bharat Nirman target of connecting 1000 + habitations (500 + for hilly and tribal areas) by 2009.

Also, keeping in view the need for nationwide connectivity and increased mobility, an expanded programme for highway development as also a "Special Accelerated Development Road Programme for the North Eastern Region (SARDPNE), as proposed by the Committee on Infrastructure, under the chairmanship of the Prime Minister, is being taken up with full vigour.

Besides, in order to remove deficiencies, the thrust would continue to be on construction of missing links, improvement of low-grade sections, rehabilitation and reconstruction of weak bridges, construction of bypasses and 4-laning and strengthening of weak 2-lanes.

Financing of investment for the expanded programme of highway development is a massive task. Thus, involvement of private sector for development of roads under National Highway Development Programme through Build Operate Transfer (BOT) route has been taken up in a major way. Accordingly, it has been decided that for NHBP Phase-III onwards, all contracts for provision of road services would be awarded only on BOT basis with Engineering Procurement Contracts (EPC) awards being made in specified exceptional cases only. In order to facilitate involvement of private sector in road development programme various enabling measures have been taken by the government. A Model Concession Agreement for BOT projects has been evolved.

It is also proposed to strengthen the institutional capacity of NHAI by making it a multi-disciplinary professional body with high quality expertise.

Ports : The Ports act as transshipment point between water transport and service transport and, therefore, play a crucial role in the transportation system for facilitating international trade. There are 12 major ports and 184 minor / intermediate ports along India's 7516 km coastline. The major ports handle about 75 per cent of the port traffic of the country and remaining 25 per cent is handled by minor / State ports.

The thrust in the Tenth Plan is on creation of general and bulk cargo handling facilities with focus on container traffic and improvement in the efficiency and productivity through private sector participation by the introduction of organisational changes and rationalisation of manning scales.

Keeping in view the need for meeting the requirement of traffic efficiently and at minimum cost to the users, there is a need to formulate a perspective plan for long-term development of each major port. The augmentation of berth capacity may be preferably through private investment or public-private partnership.

In order to ensure smooth evacuation of cargo from the port and movement to the port, it has been decided that all major ports will be provided rail-road connectivity on priority.

There has been steady improvement in the port performance over the years. Traffic handled at major ports has gone up from 383.62 MT during 2004-05 to 423.42 MT during 2005-06.

Inland Water Transport (IWT) : IWT is an energy efficient, environmentally clean and economical mode of transport. India is richly endowed with waterways comprising river systems and canals. It is estimated that a total of 14544 km of waterways could be used for passenger and cargo movement. However, capacity of the sector is grossly under-utilised as most navigable waterways suffer from hazards like shallow water and narrow width of channel during dry weather, silting

of river beds and erosion of banks, absence of adequate infrastructural facilities like terminals for loading and berthing and surface road links.

The thrust in the Tenth Plan is on development of infrastructure facilities with a focus on NE region and private sector participation so that there is a gradual shift of domestic cargo from rail-road modes to inland water transport.

CIVIL AVIATION

The main advantage of air transport lies in its speed. No other mode of transport can approach the aircraft in speed and travel particularly, over long distances. Aviation shrinks the planet and facilitates international commerce and trade. Aviation facilitates tourism. Strategic and Defence requirements also necessitate the provision of an efficient and reliable network of air services and airports.

The Civil Aviation sector has played an important role in India's economy. It provides fastest and reliable transport for movement of passenger and cargo traffic. The sector is broadly structured into three distinct functional entities - regulatory-cum-development, operational and infrastructure. Directorate General of Civil Aviation and Bureau of Civil Aviation Security perform the regulatory functions, operational functions are performed by Air India Ltd., Indian Air Lines Limited, Pawan Hans Helicopters Ltd. and other scheduled / non-scheduled airlines operations and infrastructure facilities are provided by the Airport Authority of India. The main thrust in the Tenth Plan for Civil Aviation development is to provide world-class infrastructure facilities and efficient, safe and reliable air services to meet the requirement of domestic and foreign trade and tourism. In order to ensure time bound creation of world class airports and evolve a policy and regulatory framework for Public-Private Partnership (PPP) to maximise capital inflows and efficiency the Committee on Infrastructure (CoI) under the chair of Prime Minister decided interalia to set up a statutory regulatory body for economic regulation and dispute resolution, formulate a comprehensive national policy on civil aviation, prepare a Model Concession Agreement (MCA) to promote PPP restructure of Delhi and Mumbai airports using PPP approach and to revamp the Airport Authority of India.

Considerable headway has been made with regard to the implementation of decisions taken. The paper on economic regulatory and dispute resolution, the Civil Aviation Policy as also the MCA are in the process of being finalised. Four metro airports at Delhi, Mumbai, Chennai and Kolkata; six Greenfield airports and 35 non-metro airports would be developed.

TOURISM

The Tenth Plan recognised the vast employment generating potential of Tourism and the role it can play in furthering the socio-economic objectives of the Plan. The Travel and Tourism sector creates more jobs per million rupees of investment than any other sector of the economy and is capable of providing employment to a wide spectrum of job seekers from the unskilled to the specialised even in the remote parts of the country. Tourism is the third largest net earner of foreign exchange for the country. The new Tourism Policy envisages a framework, which is Government led, private-sector driven and oriented towards community welfare, with the Government creating the legislative framework and basic infrastructure for tourism development, the private sector providing the quality products and the community providing active support. The new policy is being achieved through five key strategic

objectives, viz.: (i) positioning tourism as a national priority; (ii) enhancing India's competitiveness as a tourist destination; (iii) improving and expanding product development; (iv) creation of world class infrastructure; and (v) effective marketing plans and programmes.

India's share in international tourist arrivals was 0.34 per cent in 2002 and increased to 0.49 per cent during 2005. The increasing trend has been maintained over the last three years and international tourist arrivals touched 3.92 million in 2005. The World Travel and Tourism Council have identified India as one of the foremost growth centres in the world in the coming decade. Higher plan outlays have been provided during the Tenth Plan for development of infrastructure at tourist destinations and circuits and for effective marketing and promotion. An aggressive 'Incredible India' campaign and active participation of State Governments in promoting tourism are expected to enhance India's share of international arrivals in the coming years. Domestic tourism is estimated to be much higher than international tourism and has also been rising rapidly.

VOLUNTARY ACTION CELL

The Voluntary Action Cell (VAC) of the Planning Commission acts as a facilitator for the Government-Voluntary Sector collaboration. VAC primarily deals with broad policy matters relating to the voluntary sector and is preparing and updating a comprehensive database on NGOs.

A Draft National Policy on the Voluntary Sector has been prepared by Planning Commission in consultation with VOs / NGOs and sent to the PMO for suggestions. A Steering Committee on voluntary sector for 11th Five-Year Plan (2007-12) has been constituted. VAC has coordinated five Regional Consultations with NGOs on the Draft Approach Paper to the 11th Five-Year Plan.

ENVIRONMENT AND FORESTS

Cleaning of major rivers by 2007 is one of the monitorable targets under the Tenth Plan. With a view to improve the water quality of major rivers in the country under the National River Conservation Plan (NRCP), various activities are being undertaken during the Tenth Plan. NRCP presently, includes river pollution abatement works in 157 towns along 31 polluted stretches of rivers spread over 18 states. For 2005-06, the target under NRCP was creation of 564.43 million litres per day (MLD) of STP capacity to be created through commission of 33 STPs. The achievement was indicated as 311.94 MLD of STP capacity created through commissioning of 13 STPs.

The target of increasing the existing 23.68 per cent tree / forest cover of the country to 25 per cent is another monitorable target in the Tenth Five-Year Plan. Bio-diesel Mission, mooted as one of the measures towards this objective, involves cultivation of non-edible oil-seeds including Jatropha in wastelands for production of bio-diesel and subsequent blending with petro-diesel. Planning Commission has mooted this Mission that would start with 5 per cent blending of bio-diesel with petro-diesel which would be later expanded to reach 20 per cent level. The project is being implemented by the Ministry of Rural Development (Nodal Ministry). The Ministry in 2005-06 took steps to get EFC approval for spending Rs. 50 crore for planting about 18 crore Jatropha saplings in about 8000 ha spread over 9 States. Subsequently, the Mission would be extended to other States also. The Mission would create employment in rural areas and greening created will be entitled for emission trading under Kyoto Protocol.

The MoEF has been streamlining the procedure to bring all forest fringe villages under the ambit of the Joint Forest Management (JFM) Scheme. The MoEF provides assistance for afforestation activities through JFM under the Centrally Sponsored Scheme—National Afforestation Programme (NAP) which includes JFM Committees. 28 States have adopted JFM so far. Till 31 July 2005, about 20.11 million hectares of forest area had been brought under 99,708 JFMCs.

The proposed National Bamboo Mission envisages promotion of cultivation, processing of bamboo and manufacturing of high and modern products for large-scale use in housing, transport and other industries. Full Planning Commission has recently approved a CSS for this purpose at an estimated cost of Rs 600 crore to be implemented through the Ministry of Agriculture. This will create employment / livelihood opportunities from cultivation and value addition of bamboo at community level apart from providing wood substitution by bamboo products.

PEO

The Programme Evaluation Organisation (PEO) undertakes evaluation of selected programmes / schemes under implementation, as per requirements of the Planning Commission and Ministries / Departments of Government of India. The evaluation studies are designed to assess the performance, process of implementation, effectiveness of the delivery system and impact of programmes. The PEO also provides technical guidance and assistance to various Ministries in evaluating the on-going programmes. It also shares its experience in development evaluation with various government agencies through training programmes, seminars, scrutiny of research proposals and other modes of interactions. The PEO has so far conducted 195 studies / activities, and there are 17, ongoing prioritised studies.

PROGRAMME IMPLEMENTATION

MONITORING OF INFRASTRUCTURE SECTORS

The Infrastructure and Project Monitoring Division (IPMD) in the Ministry of Statistics and Programme Implementation monitors the performance of the country's eleven key infrastructure sectors, namely, Power, Coal, Railways, Shipping and Ports, Telecommunications, Cement, Fertilisers, Petroleum, Road and Civil Aviation. It prepares and submits monthly Review Reports and Capsule Reports on the performance of infrastructure sectors, inter-alia, to the Prime Minister's Office and the Cabinet Secretariat. The growth rate in respect of each infrastructure sector since 1997-98 and the production / achievement during 2005-06 is given in table 22.1

MONITORING OF TWENTY-POINT PROGRAMME

The Twenty-Point Programme (TPP) was conceived for coordinated and intensive monitoring of a number of schemes implemented by the Central Government and the State Governments with the objective of improving the quality of life of the people, especially those living below the poverty-line. It was meant to give a thrust to schemes relating to poverty alleviation, employment generation in rural areas, housing, education, family welfare and health, protection of environment and many other schemes having a bearing on the quality of life in the rural areas. The programme was initiated in the year 1975 and restructured in 1982 and again in 1986.

The present programme, known as TPP-86, comprises 20 Points containing 119 items. Out of which 54 are monitored on the basis of evaluatory criteria and 65

against pre-set physical targets. Of the later, 20 important items have been selected for monitoring on a monthly basis. The targets are fixed by the administrative Ministries at the Centre in consultation with the State Governments / Union Territory Administrations.

MONITORING DESIGN AT THE CENTRE

At the Central Government level, the progress is monitored and reviewed both by the Departments / Ministries concerned and the Ministry of Statistics and Programme Implementation (MOSPI). While the administrative Ministries monitor the specific schemes they are responsible for, this Ministry monitors the whole gamut of the schemes included in the Programme.

The Ministry brings out Monthly Progress Report (MPR) on Twenty-Point Programme in respect of 20 selected items. The report covers achievements vis-a-vis pre-set physical targets for these items. The States are ranked on the basis of their performance in respect of 12 key items out of the 20 items chosen for monthly monitoring.

The Ministry also brings out a Monthly Capsule Report and an Yearly Review Report on Twenty-Point Programme. The Capsule Report contains highlights of the Monthly Progress whereas the Yearly Review Report contains information on all the items covered under Twenty-Point Programme.

The performance of the monthly monitoring items under the Twenty-Point Programme for the last three years, i.e., 2003-04, 2004-05 and 2005-06 is given in the table 22.2.

MEMBER OF PARLIAMENT LOCAL AREA DEVELOPMENT SCHEME

The Member of Parliament Local Area Development Scheme (MPLADS) was launched on 23 December 1993, to enable Members of Parliament to recommend works for creation of fixed community assets, based on locally felt developmental needs. The Scheme is governed by a set of guidelines, which have been comprehensively revised and issued in November 2005.

Some of the salient features of the scheme are enumerated below :

- Works which are developmental in nature, based on locally felt needs and always available for public use at large, are eligible under the scheme.
- The Members of Parliament have a recommendatory role under the Scheme. The MPs recommend their choice of works to the concerned District Authorities who get them implemented by following the established procedure of the concerned State Government.
- Examining the eligibility, sanctioning, funding, selection of implementing agencies, prioritisation and overall execution, monitoring of the scheme at the ground level, is done by the district authorities.
- The Lok Sabha Members can recommend works in their respective constituencies. The elected members of Rajya Sabha can recommend works anywhere in the State from which they are elected. Nominated Members of the Lok Sabha and Rajya Sabha may select works for implementation anywhere in the country.
- The funds released under the scheme are non-lapsable, i.e., the liability of funds not released in a particular year is carried forward for making releases

in the subsequent years subject to eligibility. The annual entitlement per MP is at present Rs. 2 crore.

- Important items of works like drinking water, education, public health, and funds for development of SC / ST are given priority.
- There is no limit for a work to be executed by Government Agencies. There is a ceiling of Rs. 25 lakh for the works of Trust / Societies.
- The maximum limit for rehabilitation of work in the affected areas by severe calamities is now Rs. 50 lakh.
- In order to give special attention to Development of areas inhabited by Scheduled Castes and Scheduled Tribes, 15 per cent of MPLADS funds would be utilised for areas inhabited by SC population and 7.5 per cent for areas inhabited by ST population.
- The role of Panchayati Raj Institutions and Urban Local Bodies as the implementing Agency is now stressed.
- Release of Rs. 1 crore in respect of MPs at the time of constitution of Lok Sabha and election to the Rajya Sabha is done automatically without waiting for a monthly progress report.
- To bring in more financial accountability, a Utilisation Certificate for the previous financial year and the Audit Certificate for the funds released in the year prior to the previous year are also prerequisites for the release of the second instalment. Release of first instalment is made on the basis of the release of second instalment of previous year having been made.
- The normal financial and audit procedures prevalent in the states in which the works are executed apply with regard to the implementation of the works.

Since its inception, the Scheme has immediately benefited the local community by meeting their various developmental needs such as drinking water facility, education, electricity, health and family welfare, irrigation, non-conventional energy, community centres, public libraries, bus stands / stops, roads, pathways and bridges, etc.

As on 31 March 2006, Rs 14,923.70 crore has been released, since the inception of the Scheme. As reported from the Districts, an expenditure of Rs 13,301.12 crore has been incurred. The percentage utilisation over release is 89.13. A total of 9,04,955 works have been sanctioned and 8,00,973 works have been completed, as on 31 March 2006, since the inception of the scheme. Percentage of works completed as sanctioned is 88.50.

MPLADS performance has improved due to pro-active policy initiatives, focused monitoring and review. The substantial achievement in scheme performance from April 2004 till March 2006 is as under :

- There has been a remarkable improvement in the utilisation of funds. Percentage utilisation over release has risen to 89.13 from 82.18 as on 31 March 2004.
- There has been a reduction of Rs 470.57 crore in the unspent balance, due to policies towards financial discipline.
- Substantial increase in the number of works completed has been achieved. The percentage of works completed to the sanctioned has increased to 88.50 from 80.14 as on 31 March 2004.

TABLE 22.1 : ANNUAL GROWTH RATE OF INDUSTRIAL INFRASTRUCTURE SECTORS

Growth Rate (in %age)

S.No.	Sector	1997-98 per cent	1998-99 per cent	1999-00 per cent	2000-01 per cent	2001-02 per cent	2002-03 per cent	2003-04 per cent	2004-05 per cent	2005-06 per cent	Actuals (2005-06)	
1.	Power	6.6	6.6	7.1	3.9	3.1	3.2	5.0	5.2	4.8	615.75	(BU)
2.	Coal	3.6	-2.0	3.0	3.6	4.2	4.4	5.6	6.1	6.4	401.52	(MT)
3.	Finished Steel	0.6	-1.5	12.5	6.7	4.3	9.2	13.7	7.6	6.0	44.78	(MT)
4.	Railway Revenue Earning Freight Traffic	5.0	-2.0	8.4	3.7	4.0	5.3	7.5	8.1	10.7	667.39	(MT)
5.	Cargo Handled at Major Ports	10.6	0.1	8.0	3.4	2.4	9.0	10.0	11.3	10.3	423.41	(MT)
6.	Telecommunications:											
	a) Addition in Switching Capacity	13.0	36.1	40.2	6.4	-2.6	-35.6	0.1	49.8	85.8	12475.29	(000 Lines)
	b) Telephone Connections	27.1	16.4	29.7	20.5	-4.7	-39.8	148.8	-17.7	123.3	15546.47	(000 Nos.)
	c) Cell Phone connections	N.A.	N.A.	N.A.	N.A.	N.A.	119.2	115.3	10.4	89.4	28172.37	(000 Nos.)
7.	Fertilizers	17.1	3.7	4.8	2.9	-0.5	-1.1	-1.4	8.0	0.8	15.52	(MT)
8.	Cement	9.1	5.6	14.0	-2.8	9.5	8.8	6.1	8.2	10.7	147.81	(MT)
9.	Petroleum											
	a) Crude Oil	2.8	-2.8	-2.2	1.5	-1.2	3.2	1.0	1.8	-5.3	32.20	(MT)
	b) Refinery	3.6	5.2	25.3	20.3	3.7	4.9	8.2	4.3	2.1	129.84	(MT)
10.	Civil Aviation											
	a) Export Cargo handled	-0.2	-4.4	10.8	5.1	4.1	13.3	1.0	12.4	7.3	466659	(Tonnes)
	b) Import Cargo handled	1.4	-2.4	16.2	3.6	-1.0	18.6	13.4	24.4	15.8	319010	(Tonnes)
	c) Passengers handled at International Terminals	3.1	0.0	0.0	4.6	-5.0	4.8	6.5	14.0	12.8	168.44	(Lakh No.)
	d) Passengers handled at Domestic Terminals	-2.8	0.9	7.5	7.7	-5.7	9.6	13.1	23.6	27.1	302.63	(Lakh No.)
11.	Roads											
	a) Upgradation of Highways	-3.4	47.6	68.6	32.9	1.1	53.5	-16.6	16.1	-23.4	5296	(Kms.)
	b) Rehabilitation/construction of bridges	-62.5	137.5	82.5	28.8	-8.2	16.3	-14.0	-14.6	-5.7	99	(Nos.)

BU - Billion Units MT - Million Tonnes * Provisional

Source : C.S.O., M/o Statistics & P.I.

TABLE 22.2 : ALL INDIA PERFORMANCE OF 20-POINT PROGRAMME

From 2003-2004 to 2005-2006

Sl. No.	Point No.	Items	Unit	2003-04			2004-2005			2005-06		
				Target	Achieve- ment	%	Target	Achieve- ment	%	Target	Achieve- ment	%
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	01B	Sampoorna Gramin Rozgar Yojana @	Lakh Mandays	-	7523.6	-	-	7904.0	-	-	7294.1	-
2.	05A	Distribution of Surplus Land	000 Acre	17.6	24.0	136.4	17.6	36.3	206.3	20.0	54.1	270.5
3.	07A	Drinking Water Supply (Villages/Habitations)	000 Nos.	111.1	40.8	36.7	74.9	73.1	97.6	56.3	93.1	165.6
4.	08A	Community Health Centres (CHC)	Nos.	575.0	148.0	25.7	514.0	64.0	12.5	575.0	397.0	69.0
5.	08B	Primary Health Centres (PHC)	Nos.	406.0	41.0	10.1	406.0	423.0	104.2	406.0	475.0	117.0
6.	08D	Immunisation of Children (DPT, Polio & BCG)	Lakh Nos.	253.5	274.1	108.1	256.9	292.2	113.7	258.0	260.3	100.9
7.	09C	ICDS Blocks Oprl. (Cum.)	Nos.	5132.0	5263.0	102.6	5652.0	5419.0	95.9	5652.0	5747.0	101.7
8.	09D	Anganwadies Oprl. (Cum.)	000 Nos.	673.0	640.8	95.2	743.2	706.6	95.1	754.8	760.3	100.7
9.	11A	SC Families Assisted	000 Nos.	2400.0	2559.4	106.6	2490.5	2811.2	112.9	2470.0	3257.6	131.9
10.	11B	ST Families Assisted	000 Nos.	1117.0	1411.0	126.2	1116.6	1563.3	140.0	1131.6	1873.1	165.5
11.	14C	Indira Awaas Yojana	000 Nos.	1484.6	1198.1	80.7	1562.4	1420.6	90.9	1441.2	1414.7	98.2
12.	14D	EWS Houses Provided	000 Nos.	58.2	58.2	100.0	50.2	52.4	104.4	43.4	104.6	241.0
13.	14E	LIG Houses	000 Nos.	6.8	12.8	188.2	16.9	22.3	132.0	24.4	21.8	89.3
14.	15	Slum Improvement (Population)	000 Nos.	3670.5	4991.1	136.1	5197.6	6170.6	118.7	1521.7	1626.1	106.9
15.	16A	Tree Plantation	Lakh Nos.	8622.0	7611.4	88.3	12923.6	9076.1	70.2	12560.0	10265.3	81.7
16.	16B	Area to be covered (Under Pln.) Public & Forest Lands	000 Hect.	1071.7	844.4	78.8	1477.9	1126.1	76.2	1629.5	1485.6	91.2
17.	19A	Villages Electrified	Nos.	24011.0	5475.0	22.8	23860.0	8499.0	35.6	20084.0	14058.0	70.0
18.	19B	Pump Sets Energised	000 Nos.	217.07	231.08	106.8	212.2	287.9	135.7	386.6	311.0	80.4
19.	19C	Improved Chullahs @	000 Nos.	-	78.1	-	-	64.9	-	-	80.4	-
20.	19D	Bio-gas Plants	000 Nos.	133.0	117.3	88.2	80.1	88.4	110.4	20.2	52.3	259.0

@ The Schemes do not have any physical targets.

Source : C.S.O., M/o Statistics & P.I.

23 Rural Development

INTEGRATED development of rural areas is one of the abiding tasks before the Government of India. The National Common Minimum Programme (NCMP) of the Central government reiterates the cardinal importance of villages to the overall development of the country and commits to work towards development of rural areas, which for various reasons could not keep pace with urban areas in the past.

In conformity with this commitment of the Government, the Ministry of Rural Development accords foremost priority to development in rural areas and eradication of poverty and hunger from the face of rural India. A number of new initiatives have been taken in the recent years for creation of social and economic infrastructure in rural areas to bridge the rural urban divide as well as to provide food security and to fulfil other basic needs of the rural populace.

The renewed emphasis on rural development is also visible in the commensurate progressive increase in the allocation of resources for implementation of poverty alleviation programmes. For the Tenth Five Year Plan, the allocation of funds for rural development programmes has been enhanced to Rs. 76,774 crore as against Rs. 42,874 crore in Ninth Plan. An allocation of Rs. 24480 crore was made for the Ministry during 2005-06. The budget estimate for the year 2006-07 was Rs. 31443.62 crore.

Addressing the challenge of unemployment in the rural areas of the country is central to the development of rural sector for ameliorating the economic condition of the people. Wage employment is provided in rural areas under National Rural Employment Guarantee Act (NREGA) and Sampoorna Grameen Rozgar Yojana (SGRY) whereas self-employment is provided under Swarnajayanti Gram Swarozgar Yojana (SGSY). Besides generating employment these wage employment schemes also ensure creation of durable assets in rural areas. Initiatives are also taken by the Ministry to build and upgrade the basic rural infrastructure through various schemes. Under Pradhan Mantri Gram Sadak Yojana (PMGSY) construction and upgradation of rural roads are taken up to ensure rural connectivity. It is expected under the scheme that an expanded and renovated rural road network will lead to an increase in rural employment opportunities, better access to regulated and fair market, better access to health, education and other public services so as to accelerate the pace of economic growth in rural areas. Similarly basic amenities for housing, drinking water and toilets, etc. are provided under Indira Awaas Yojana (IAY), Accelerated Rural Water Supply Programme (ARWSP) and Total Sanitation Campaign (TSC) to enhance the welfare and well-being of the vulnerable sections of rural population. Area Development is encouraged through Watershed Programmes to check the diminishing productivity of waste land and loss of natural resources.

The Ministry of Rural Development is also committed to fulfil the goals of Bharat Nirman - a time-bound action plan for development of rural infrastructure espoused by the President of India Dr. A.P.J Abdul Kalam who described it as “the platform on which my government will construct its New Deal for Rural India”. Prime Minister Dr. Manmohan Singh extolled that “Bharat Nirman will be time-bound business plan for action in rural infrastructure for the next four years. Under Bharat Nirman, action is proposed in the areas of irrigation, roads, rural housing, rural water supply, rural electrification and rural telecommunication connectivity. We have set specific

targets to be achieved under each of these goals so that there is accountability in the progress of this initiative." Bharat Nirman is thus viewed as an effort to unlock rural India's growth potential and be a key for ushering a new era. It is expected that Bharat Nirman will lead to considerable rural assets creation along with the National Rural Employment Guarantee Act.

Alongside the new initiatives some of the existing schemes have also been streamlined and strengthened to make their implementation more speedy and effective.

NATIONAL RURAL EMPLOYMENT GUARANTEE ACT

The **'National Rural Employment Guarantee Act' (NREGA)** was enacted in September 2005 and brought into force w.e.f. 2 February 2006 in 200 most backward districts with the objective of providing 100 days of guaranteed unskilled wage employment to each rural household opting for it. The NREGA marks a paradigm shift and stands out among the plethora of wage employment programmes, as it bestows a legal right and guarantee to the rural population through an Act of Parliament and is not a scheme unlike the other wage employment programmes. The ongoing programmes of Sampoorna Grameen Rozgar Yojana (SGRY) and National Food for Work Programme (NFFWP) have been subsumed in NREGA. The NREGA would cover all districts of the country within five years. The focus of the Act is on works relating to water conservation, drought proofing (including afforestation / tree plantation), land development, flood control / protection (including drainage in waterlogged areas) and rural connectivity in terms of all-weather roads. Each district has to prepare perspective plan of 5 years with a bottom-up approach deriving from the needs of the local community. The said plan should have the approval of especially the derived community and the PRIs. Panchayats have a key role in planning, implementation and monitoring of the Act through preparation of perspective plan, approval of shelf of projects, execution of works at least to the extent of 50 per cent in terms of costs. The Act envisages strict Vigilance and Monitoring. Gram Sabha has the power of social audit. Local Vigilance and Monitoring Committees are to be set up to ensure the quality of works. Provision for due representation in such committees for SC / STs, women has also been made. At least 1 / 3rd of the beneficiaries are to be women. Key records such as muster rolls, asset registers and employment registers are to be maintained and public access to them ensured. The Act also envisages a grievance redressal mechanism and helpline. A comprehensive MIS, has been developed to capture work-wise and household-wise data and track the progress of resources invested.

SAMPOORNA GRAMEEN ROZGAR YOJANA

The Sampoorna Grameen Rozgar Yojana (SGRY) was launched on 25 September, 2001 by merging the on-going schemes of EAS and the JGSY with the objective of providing additional wage employment and food security, alongside creation of durable community assets in rural areas. The programme is self-targeting in nature with provisions for special emphasis on women, scheduled castes, scheduled tribes and parents of children withdrawn from hazardous occupations. While preference is given to BPL families for providing wage employment under SGRY, poor families above the poverty line can also be offered employment whenever NREGA has been launched.

The annual outlay for the programme is Rs.10,000 crore which includes 50 lakh tonnes on food grains. The cash component is shared between the Centre and the

States in the ratio of 75:25. Food grains are provided free of cost to the States / UTs. The payment of food grains is made directly to FCI at economic cost by the Centre. However, State Governments are responsible for the cost of transportation of food grains from FCI godown to work-site / PDS shops and its distribution. Minimum wages are paid to the workers through a mix of minimum five kg of food grains and at least 25 per cent of wages in cash.

The programme is implemented by all the three tiers of Panchayati Raj Institutions. Each level of Panchayat is an independent unit for formulation of Action Plan and executing the scheme. Resources are distributed among District Panchayats, Intermediate Panchayats and the Gram Panchayats in the ratio of 20:30:50.

The Gram Panchayats can take up any work with the approval of the gram sabha as per their felt need and within available funds. Fifty per cent of the funds earmarked for the gram panchayats are to be utilised for infrastructure development works in SC / ST localities. 22.5 per cent resources must be spent on individual beneficiary schemes meant for SCs / STs out of the resource share of District Panchayats and Intermediate Panchayats. Contractors are not permitted to be engaged for execution of any of the works and no middlemen / intermediate agencies can be engaged for executing works under the scheme. The programme is regularly monitored. The programme is being evaluated through impact studies conducted by reputed institutions and organisations sponsored by the Central / State governments.

NATIONAL FOOD FOR WORK PROGRAMME

The National Food for Work Programme was launched in November 2004 in 150 most backward districts of the country, identified by the Planning Commission in consultation with the Ministry of Rural Development and the State governments.

The objective of the programme was to provide additional resources apart from the resources available under the Sampoorna Grameen Rozgar Yojana (SGRY) to 150 most backward districts of the country so that generation of supplementary wage employment and providing of food-security through creation of need based economic, social and community assets in these districts are further intensified. The scheme was 100 per cent Centrally sponsored. The programme has since been subsumed in National Rural Employment Guarantee Act which has come in force in 200 identified districts of the country including 150 NFFWP districts. The Act provides 100 days of work guarantee to every rural household whose members volunteer to do unskilled manual work.

PRADHAN MANTRI SADAK YOJANA

The Pradhan Mantri Gram Sadak Yojna (PMGSY) was launched on 25 December 2000 as a fully funded Centrally Sponsored Scheme. The primary objective of the PMGSY is to provide connectivity to all the eligible unconnected habitations of more than 500 persons in the rural areas (250 persons in the hilly and desert areas) by good quality all-weather roads.

Under Bharat Nirman, goal has been set to provide connectivity to all the habitations with population of more than 1000 in the plain areas and habitations with a population of 500 or more in hilly and tribal areas in a time-bound manner by 2009. The systematic upgradation of the existing rural road networks is also an integral component of the scheme. Accordingly, an Action Plan has been prepared for connecting 66,802 habitations with 1,46,185 km of all-weather roads. This Action

Plan also envisages upgradation / renewal of 1,94,130 km of the existing rural road network. It is estimated that an investment of about Rs.48,000 crore would be required for achieving the targets under Bharat Nirman. The implementation strategy focuses on quality, cost management and 'on time' delivery.

Up to 31 March 2007, project proposals for 63667 road works measuring 220956.31 km. and valued at Rs. 44661.96 crore has been sanctioned by this Ministry. An amount of Rs. 22401.94 crore has been released to the various States / UTs, up to March 2007. 39045 road works measuring 120577.24 km. have been completed up to 31st March 2007 with the expenditure of Rs. 21025.97 crore.

RURAL HOUSING

To meet the shortage of housing in rural areas, a programme called Indira Awaas Yojana (IAY) was launched in May 1985 as a sub-scheme of Jawahar Rozgar Yojana (JRY). It is being implemented as an independent scheme since 1 January 1996 and is the flagship programme for rural housing. The Indira Awaas Yojana aims at providing assistance to rural people below the poverty-line belonging to Scheduled Castes / Scheduled Tribes, freed bonded labourers and non-scheduled castes / scheduled tribes categories for the construction of dwelling units and upgradation of existing unserviceable kutcha houses by providing grants-in-aid. From 1995-96, IAY benefits have been extended to widows or next-of-kin of defence personnel killed in action. Benefits have also been extended to ex-servicemen and retired members of the paramilitary forces as long as they fulfill the normal eligibility conditions of IAY. Three per cent of funds are reserved for the disabled persons living below the poverty-line in rural areas.

Once the annual allocations are made and physical targets decided, the district panchayat / District Rural Development Agency (DRDA) decide the Panchayatwise number of houses to be constructed / upgraded under IAY, during a particular financial year. Targets are intimated to the concerned Gram Panchayats. Thereafter, the Gram Sabha selects the beneficiaries from the list of eligible BPL households, restricting this number to the target allotted as per the programme guidelines. Selection of beneficiary by the Gram Sabha is final. No approval by any higher body is required. Zilla Parishads / DRDAs and Block Development Officers are informed accordingly to provide assistance to selected beneficiaries. To ensure transparency and efficiency in the allotment of houses under the scheme the permanent waitlist for IAY at Gram Panchayat level based on the BPL census of 2002 has also been initiated.

Under the Scheme, allotment of the house is done in the name of the female members of the households or in the joint names of husband and wife. A minimum of 60 per cent of funds are to be utilised for construction of houses for SCs / STs. Sanitary latrines and smokeless chulhas are also provided to the beneficiaries. Selection of construction technology, materials and design is left entirely to the choice of beneficiaries. The ceiling on assistance for construction of new houses has been increased from Rs. 20,000 to Rs. 25,000 per unit for the plain areas and from Rs. 22,000 to Rs. 27,500 per unit for the hilly / difficult areas with effect from 1 April 2004. The upper limit in respect of conversion of kutcha houses into semi-pucca houses (Upgradation) has also been increased from Rs. 10,000 to Rs. 12,500 per unit from the same date and up to 20 per cent of IAY funds can be utilised for this purpose.

Around 143.13 lakh houses have been constructed / upgraded from 1985-86 to 2005-2006 (as per reports received up to April 2006) under the Scheme with an expenditure of about Rs. 26305.08 crore.

The Central Allocation for rural housing during 2004-2005 was Rs. 2500 crore, out of which an amount of Rs. 2460.67 crore was allocated for IAY with a target of building about 15.62 lakh houses. The entire amount was released and about 15.21 lakh houses have been reported constructed / upgraded.

An allocation of Rs. 2750 crore was made available during 2005-2006 for Rural Housing. For Indira Awaas Yojana, an amount of Rs. 2732.40 crore was allocated for construction / upgradation of 14.41 lakh houses during 2005-2006. Against this, an amount of Rs. 2738.22 crore has been released and 15.52 lakh houses have been constructed in the year as per reports received from the States.

As construction of houses for the rural poor is a significant activity of asset creation in rural areas and contributes substantially towards the concept of Bharat Nirman, this has been included as one of the six components of the 'Bharat Nirman' Programme. Under this programme sixty lakh houses are to be constructed for rural BPL families during a span of four years beginning from 2005-06.

SWARNAJAYANTI GRAM SWAROZGAR YOJANA

The Swarnjayanti Gram Swarozgar Yojana (SGSY) was launched as an integrated programme for self-employment of the rural poor with effect from 1 April 1999. The objective of the scheme is to bring the assisted poor families above the poverty line by organising them into Self Help Groups (SHGs) through the process of social mobilisation, their training and capacity building and provision of income generating assets through a mix of bank credit and government subsidy. The scheme emphasizes establishment of activity clusters through selection of key activities based on aptitude and skill of the people, availability of resources and market potentiality. The scheme adopts a process approach and attempts to build the capacities of the rural poor. It provides for involvement of NGOs / CBOs / Individuals / Banks and / Self Help Promoting Institutions in nurturing and development of SHGs, including skill development. The scheme provides for the cost of social intermediation and skill development training based on the local requirement. Flexibility has been given to the DRDAs / States in the utilisation of funds for training, sanction of Revolving Fund, subsidy for economic activity based on the stage of development of groups.

The focus of the programme is on establishing a large number of micro-enterprises in rural areas based on the ability of the poor and potential of each area, both land-based and otherwise, for sustainable income generation. Due emphasis is being laid on different components such as capacity building of the poor, skill development training, credit training, technology transfer, marketing and infrastructure. The subsidy allowed under the SGSY is 30 per cent of the total project cost, subject to a ceiling of Rs 7,500 (for SC / STs and disabled persons subsidy limit is 50 per cent of the project cost subject to a ceiling of Rs 10,000). For Self-Help Groups(SHGs), subsidy would be 50 per cent of the project cost subject to a ceiling of Rs. 1.25 lakh or per capita subsidy of Rs. 10,000, whichever is less. There is no monetary ceiling on subsidy for minor irrigation projects for SHGs as well as individual swarozgaris.

The SGSY has a special focus on the vulnerable groups among the rural poor. SC / STs account for at least 50 per cent, women 40 per cent and the persons with physical disability constitute 3 per cent of the Swarozgaris respectively. The SGSY seeks to promote multiple credits rather than a one-time credit injection.

The SHGs may consist of 10-20 members in case of minor irrigation, and in case

of disabled persons and difficult areas, i.e. hilly, desert and sparsely populated areas, this number may be a minimum of five. Self Help Groups should also be drawn from the BPL list approved by the Gram Sabha. The SHGs broadly go through three stages of evolution such as group formation, capital formation through the revolving fund and skill development and taking up of economic activity for income generation.

Selection could be made up to 10 key activities per block based on local resources, occupational skills of the people and availability of market so that the Swarozgaris can draw suitable incomes from their investment. Under SGSY each block should concentrate on 4-5 selected key activities and attend to all aspects of these activities in a cluster approach, so that swarozgaris can draw sustainable income from their investments. The scheme lays special emphasis on development of swarozgaris through well designed training courses tailored to the activities selected and the requirement of each swarozgari. SGSY is being implemented through the District Rural Development Agencies (DRDAs), with active involvement of panchayati raj institutions, banks and NGOs. It is financed on 75:25 cost-sharing basis between the Centre and the states.

Since the inception of the programme 22.52 lakh Self-Help Groups(SHGs) have been formed covering 66.97 lakh swarozgaris. These include 35.54 lakh members of the SHGs and 31.43 lakh individual Swarozgaris who have been assisted with a total investment of Rs. 14403.73 crore. Out of total Swarozgaris assisted, SCs / STs were 45.54 per cent and women 47.85 per cent. During 2006-2007 the Central allocation for the scheme was Rs.1200 crore.

NATIONAL SOCIAL ASSISTANCE PROGRAMME AND ANNAPURNA

The National Social Assistance Programme (NSAP) consisting of National Old Age Pension Scheme(NOAPS) and National Family Benefit Scheme(NFBS) was being administered by Ministry of Rural Development till the programme was transferred to the State Plan along with the Annapurna Scheme from 2002-03. After transfer of the schemes, state-wise allocation of Additional Central Assistance (ACA) is made by the Ministry of Rural Development and Planning Commission. The scale of central assistance under NOAPS is Rs. 75 per month for providing pension to a destitute aged 65 years and above. Under NFBS Rs. 10,000 is being provided in the event of death of the primary bread winner of a family and under Annapurna Scheme 10 kg of food grains per month per person is provided free of cost to the beneficiaries. Number of persons to be benefited from the Scheme would be in the first instance, 20 per cent of the persons eligible to receive pension under NOAPS. State Governments / UTs can utilise the ACA provided to them by taking up one or two or all the three schemes or in any other combination in accordance with their own priorities and needs. Releases of the ACA to the States / UTs are made automatically by the Ministry of Finance in equal instalments on a monthly basis until December of the financial year. However, releases of ACA for the last quarter of the financial year depend upon the reporting of satisfactory progress of the scheme and utilisation of funds by States / UTs. Reports in this regard are submitted by States / UTs to Ministry of Rural Development, who after examination of these reports, make suitable recommendation to Ministry of Finance regarding the release of ACAs for the last three months of the financial year.

The Finance Minister in the budget speech for the year 2006-07 announced an increase in pension under NOAPS from Rs 75 per month per beneficiary to Rs. 200 per month per beneficiary.

DRDA ADMINISTRATION

A Centrally-sponsored scheme, District Rural Development Agency (DRDA) Administration was launched on 1 April 1999 with the objective of strengthening the DRDAs and making them more professional in their functioning. The funding pattern of the DRDA Administration is in the ratio of 75:25 between the Centre and the States. During 2005-2006 the revised estimate for DRDA administration was Rs. 235 crore and the whole amount was also released. In 2006-07 a budget provision of Rs. 220 crore had been made for the scheme.

CAPART

The Council for Advancement of People's Action and Rural Technology (CAPART) is an autonomous organisation under the Ministry of Rural Development. It was set up in September 1986, as a supporting and funding agency for the voluntary organisations. Its primary objective is to promote voluntary action through community participation and to propagate appropriate rural technologies for the benefit of rural masses. It has a network of regional centres at Jaipur, Lucknow, Ahmedabad, Bhubaneswar, Patna, Chandigarh, Hyderabad, Guwahati and Dharwad. The regional committees are empowered to sanction projects up to an outlay of Rs. 25 lakh in their respective regions. The Budget allocation for CAPART during the year 2006-07 was Rs. 70 crore. Since inception and up to March 2007, CAPART has sanctioned 24,466 projects involving an amount of Rs. 909.34 crore and released an amount of Rs.752.61 crore.

WATERSHED DEVELOPMENT PROGRAMMES

The Department of Land Resources in the Ministry of Rural Development is administering three area-based watershed programmes for development of wastelands/degraded lands namely Drought Prone Areas Programmes (DPAP), Desert Development Programme (DDP) and Integrated Wastelands Development Programme (IWDP) to check the diminishing productivity of wasteland and loss of natural resources.

The DPAP was launched in 1973-74 to tackle the special problems faced by those areas that are constantly afflicted by drought conditions. Presently, 972 blocks of 182 districts in 16 States are covered under the Programme. DDP was launched in 1977-78 to mitigate the adverse effects of desertification. Presently, 235 blocks of 40 districts in 7 States are covered under the Programme. IWDP has been under implementation since 1989-90. The projects under the IWDP are generally sanctioned in areas that are not covered under DDP or DPAP.

Since 1 April1995, these three programmes are being implemented on the basis of Common Guidelines for Watershed Development. Details of projects sanctioned and funds released from 1995-96 to 2005-2006 are as under:

Name of Scheme	No. of project sanctioned	Area covered (in lakh ha.)	Total funds released by Centre (Rs. in crores)
DPAP	24363	121.82	2095.33
DDP	13476	67.38	1568.79
IWDP	1382	84.56	1797.91
Grand Total	39221	273.76	5462.03

The projects under DPAP and DDP are sanctioned for 500 ha. each while the IWDP projects cover an area of 5000-6000 ha.

The cost norms for all the three schemes have been revised to Rs. 6000 per ha. Under DPAP and DDP, it is shared between the Centre and the States in ratio of 75:25. In case of IWDP, the cost sharing between the Centre and State Governments is in the ratio of 11:1.

Funds are released in seven instalments, six instalments at the rate of 15 per cent and the last instalment at the rate of 10 per cent. The first instalment is released along with the initial sanction-order and subsequent instalments on receipt of utilization for 50 per cent of the available funds as well as the following documents: (a) Quarterly Progress Reports; (b) Utilisation Certificates; (c) The Audited Statement of Accounts for the previous years; and (d) Evidence of satisfactory completion of institutional arrangements.

Projects are implemented by District Rural Development Agencies / Zilla Parishads (DRDAs / ZPs) through Project Implementing Agencies (PIAs). PIAs could be a Line Department (of the State Government), Panchayati Raj Institutions or a reputed NGO. One PIA normally handles 10-12 watershed projects covering an area of about 5000-6000 hectares. The PIA is required to maintain a technical team of 4 experts called Watershed Development Team (WDT) and individual projects (500 hectares) are planned and executed by the local people living in the watershed area called the Watershed Association (WA) through an elected body called Watershed Committee (WC).

The Department of Land Resources has brought out a new initiative called Hariyali with an objective of empowering PRIs both financially and administratively in implementation of Watershed Development Programmes. Under this initiative, all ongoing area development programmes namely, Integrated Wastelands Development Programme (IWDP), Drought Prone Areas Programme (DPAP) and Desert Development Programme (DDP) are to be implemented through the PRIs. New projects under the aforesaid area development programmes are being implemented in accordance with the Guidelines for Hariyali from 1 April 2003. Projects sanctioned prior to this date shall continue to be implemented as per the Watershed Development Guidelines of 2001.

In the new arrangement, Gram Panchayats shall implement projects under overall supervision and guidance of Project Implementation Agencies (PIAs). An intermediate panchayat may be the PIA for all the projects sanctioned to a particular Block / Taluka. In case, these Panchayats are not adequately empowered, then the Zilla Panchayat can either act as PIA itself or may appoint a suitable Line Department like Agriculture, Forestry / Social Forestry, Soil Conservation, etc., or an Agency of the State Government / University / Institute as PIA. Failing these options, the ZP / DRDA may consider appointing a reputed Non-Government Organization (NGO) in the district with adequate experience and expertise in the implementation of watershed projects or related area development works as the PIA after thoroughly examining their credentials.

The Project Implementing Agency (PIA) will provide necessary technical guidance to the Gram Panchayat for preparation of development plans for the watershed through Participatory Rural Appraisal (PRA) exercise, undertake community organisation and training for the village communities, supervise watershed development activities, inspect and authenticate project accounts,

encourage adoption of low cost technologies built upon indigenous technical knowledge, monitor and review the overall project implementation and set up institutional arrangements for post-project operation and maintenance and further development of the assets created during the project period.

Funds for the watershed development projects being implemented as per Hariyali Guidelines are being released in five instalments @ 15 per cent, 30 per cent, 30 per cent, 15 per cent and 10 per cent.

LAND REFORMS

Two Centrally Sponsored Schemes viz; (i) Computerisation of Land Records (CLR) and (ii) Strengthening of Revenue Administration and Updating of Land Records (SRA & ULR) are administrated by Land Reforms Division in the Department of Land Resources.

COMPUTERISATION OF LAND RECORDS

The Centrally Sponsored Scheme on Computerisation of Land Records (CLR) was started in 1988-89 with 100 per cent financial assistance on a pilot project basis in eight Districts viz. Rangareddy (A.P.), Sonitpur (Assam), Singhbhum (Jharkhand), Gandhinagar (Gujarat), Morena (M.P.), Wardha (Maharastra), Mayurbhanj (Orissa) and Dungarpur (Rajasthan) to remove the problems inherent in the manual systems of maintenance and updating of land records and to meet the requirements of various groups of users. It was decided that efforts should be made to computerise CORE DATA contained in land records, so as to assist development planning and to make records accessible to peoples / planners and administrators.

During the 8th Five Year Plan, the scheme was approved as a separate Centrally sponsored scheme on computerisation of land records. The total expenditure under the Scheme during 8th plan period was Rs. 59.42 crore. During 9th Five Year Plan, Ministry of Rural Development released a sum of Rs. 169.13 crore by covering 259 more districts under the Scheme. At present, the Scheme is being implemented in 582 Districts of the country leaving those Districts where there are no proper land records.

A decision has been taken during 1997-98 for operation of the Scheme at the tehsil / taluk level for facilitating delivery of computerised land records to users and public at large. Under this programme, funds are released to the State Governments for data entry work, setting up of computer centres at tehsil level, sub-division level, District Land Records Data Centre and Monitoring Cell at state headquarters and imparting training to revenue officials on application software and computer technology. So far 3519 tehsils / taluks, 365 District Land Records Data Centre, 1019 Sub-division and 16 monitoring cells have been covered under the programme of CLR. Since inception of the Scheme of CLR (1988-89), Rs. 445.38 crore has been released to the States / UTs, out of which Rs. 266.23 crore has been reported utilised by the State / UTs.

STRENGTHENING OF REVENUE ADMINISTRATION AND UPDATING OF LAND RECORDS (SRA & ULR)

With a view to assisting States / UTs in the task of updating of land records, a Centrally Sponsored Scheme for Strengthening of Revenue Administration and Updating of Land Records (SRA & ULR) was started in 1987. Initially, the Scheme was approved for the States of Bihar and Orissa in 1987-88 and extended to other States / UTs, during 1989-90. The Scheme is being implemented by state governments through

their revenue / land reforms departments. It is financed by the Centre and the state on 50:50 funds sharing basis. However, union territories are provided full Central assistance.

Under this Scheme, financial assistance is given for purchase of modern survey equipment like Global Positioning System (GPS), EDM, Total Stations, Theodolites, Work Stations, Aerial Survey, Office equipment like photocopiers, laminating machines, binding machines and basic facilities to improve work efficiency of subordinate level staff of the revenue departments, construction of office-cum-residence of patwaries, construction / repair / renovation of Training Institutes and equipment for training, etc. Since inception of the scheme, financial assistance of Rs. 324.89 crore has been provided to state governments and UTs up to 31 March, 2006 towards central share under the scheme. The utilisation of the funds reported by the States / UTs is Rs. 232.81 crore which is approximately 72 per cent of total funds released.

RURAL DRINKING WATER SUPPLY PROGRAMME

Clean drinking water is a basic necessity of life. Supply of clean drinking water in the rural areas has always been one of the highest priorities of the government. A Technology Mission on drinking water named "National Drinking Water Mission" (NDWM) was launched in 1986, which subsequently was rechristened as "Rajiv Gandhi National Drinking Water Mission" (RGNDWM) in 1991 with three key objectives:

(i) providing safe drinking water to all villages,

(ii) assisting local communities to maintain sources of safe drinking water in good condition, and

(iii) giving special attention for water supply to Scheduled Castes and Scheduled Tribes.

To achieve the objectives, Accelerated Rural Water Supply Programme (ARWSP) is being implemented to resolve the drinking water problem in rural habitations. The Central Government supplements the efforts of the states by providing financial and technical support. The Tenth Plan emphasizes participatory approach where PRIs should be the key institutions for convergence of drinking water supply programmes at the ground level. The strategy to achieve the Tenth Plan objectives can be briefly summarised as: (a) Accelerating coverage of the remaining Not Covered and Partially Covered habitations including those slipped back from fully covered to partially and not covered categories, with safe drinking water systems; (b) To tackle problems of water quality in affected habitations and to institutionalize water quality monitoring and surveillance systems; and (c) To promote sustainability, both of systems and sources, to ensure continued supply of safe drinking water in covered habitations

Accelerated Rural Water Supply Programme (ARWSP) aims at achieving this objective. Considerable success has been achieved in meeting the drinking water needs of the rural population through the said scheme. There are more than 4 million hand pumps and 2 lakh piped water schemes in the rural areas.

The ARWSP was launched during 1972-73. It is currently being implemented through the Rajiv Gandhi National Drinking Water Mission. The scheme aims at coverage of all rural habitations with population of 100 and above, specially the un-reached ones, ensure sustainability of the systems and sources, tackle the problem of water quality and institutionalise water quality monitoring and surveillance through a Catchment Area Approach.

As on 1 April 2005, 96.13 per cent of rural habitations have been Fully Covered (FC) with drinking water facilities and 3.55 per cent are Partially Covered (PC) and 0.32 per cent are Not Covered (NC) with drinking water facilities. There are slippages of FC into NC or PC due to various factors such as lowering of ground water table, systems outliving their lives, increase in population, etc.

Drinking water supply is one of the six components of Bharat Nirman, which has been envisaged to build strong rural infrastructure in four years (2005-06 to 2008-09). The task ahead is to cover all the remaining uncovered habitations and also to cover the slipped back as well as the water quality affected ones. Action Plans from State / UT Governments for achieving the goals of Bharat Nirman in a time bound manner have been obtained.

For ensuring sustainability of the systems, steps were initiated in 1999 to institutionalise community participation in the implementation of rural drinking water supply schemes by incorporating the following three basic principles:

(i) Adoption of a demand-driven responsive and adaptable approach based on empowerment of villagers to ensure their full participation in the project through a decision making role in the choice of scheme design, control of finances and management arrangements. (ii) Increasing role of government for empowering user groups / gram panchayats for sustainable management of drinking water assets and integrated water management and conservation. (iii) Partial capital cost sharing either in cash or kind or both and 100 per cent responsibility of Operation and Maintenance by end-users.

Sector Reforms Projects, based on the above principles were sanctioned in 67 districts on pilot basis. With the experience gained from these pilot projects, reform process has been scaled up in the entire country through Swajaldhara launched on 25 December 2002. A notable feature of Swajaldhara is involvement of Village Water and Sanitation Committee (VWSC) / Panchayati Raj Institutions (PRIs) in planning, implementation, operation and maintenance. This would in turn ensure sustainability of the system. 10 per cent contribution is made by the community and 90 per cent funds are provided by the Central government. In case of SC and ST habitations, community contribution can be in the form of cash, kind, labour or land or a combination of these.

Rajiv Gandhi National Drinking Water Mission (RGNDWM) adopts an integrated approach so that conservation and augmentation of water sources is interrelated with rural water supply schemes to provide sustainable supply of safe drinking water to the rural population. The Mission seeks to provide supply of 40 litres of safe drinking water in rural areas.

An initiative has been taken by Government of India in February 2006 by launching the National Rural Drinking Water Quality Monitoring and Surveillance Programme which envisages institutionalisation of community participation for monitoring and surveillance of drinking water sources at the grass-root level by Gram Panchayats and Village Water and Sanitation Committees, followed by checking the positively tested samples at the district and State level laboratories.

Another initiative taken by the Government is that from 2006-07 onwards focused funding to tackle drinking water has been started. Up to 20 per cent of ARWSP funds are to be earmarked separately for tackling water quality problems. For 2006-07, 20 per cent of ARWSP funds were allocated for funding under water quality.

CENTRAL RURAL SANITATION PROGRAMME

Rural Sanitation is a State subject. The efforts of the states are supplemented by the Central Government through technical and financial assistance under the Central Rural Sanitation Programme (CRSP).

The Programme was launched in 1986 with the objectives of improving the quality of life of rural people and providing privacy and dignity to women. The concept of sanitation was expanded in 1993 to include personal hygiene, home sanitation, safe water and disposal of garbage, human excreta and wastewater. The components of the programme included construction of individual sanitary toilets for household below poverty-line (BPL), conversion of dry latrines to water-pour flush toilets, construction of village sanitary complexes for women, setting up of sanitary marts and production centres, intensive campaign for creating awareness and health education, etc.

Keeping in view the experiences of the Central and state governments, NGOs and other implementing agencies and the recommendations of the Second National Seminar on Rural Sanitation, the strategy for the Ninth Five Year Plan was revised and the programme was restructured form 1 April 1999. The restructured programme moves away form the principle of state-wise allocation of funds, primarily based on poverty criteria, to a demand-driven approach in a phased manner. Total Sanitation Campaign (TSC) was introduced and the Allocation Based Programme was phased out by 31 March 2002. TSC is community-led and people-centred. There was a shift from a high subsidy to a low subsidy regime. The TSC approach emphasized awareness-building component and meets the demand through alternate delivery mechanism. School Sanitation has been introduced as a major component to encourage wider acceptance of sanitation among rural masses. The States / UTs are required to formulate project proposals under the TSC in order to claim Central government assistance.

Under the TSC, so far 559 projects in 30 States / UTs have been sanctioned with the total project outlay of about Rs.6240.27 crore. The Central, State and Beneficiary / Panchayat contributions are about Rs.3675.38 crore, Rs.1424.09 crore and Rs.1140.80 crore respectively. The components sanctioned in the 559 projects are (a) construction of 499 lakh individual household latrines; (b) 656690 toilets for Schools; (c) 36098 Community Sanitary Complexes; (d) 199033 toilets for Balwadis / Anganwadis and (e) 4030 Rural Sanitary Marts / Production Centres. Besides, funds have been earmarked for start-up activities, Information, Education and Communication (IEC) and Administrative charges. The total numbers of household toilets constructed up to 2005-06 are 14,48,1807.

To add vigour to the implementation of TSC Government of India has separately launched an award scheme 'Nirmal Gram Puraskar'(NGP) for fully sanitised and open defecation free Gram Panchayats, block and districts. In the first year of its institution only 40 PRIs were awarded NGP on 24 February 2005. In the second year the number of awarded PRIs / Blocks and organisation have increased to 772. His Excellency, Dr. A.P.J. Abdul Kalam, President of India, distributed the Awards on 23 March 2006.

MONITORING AND EVALUATION

The Ministry of Rural Development lays great emphasis on Monitoring and Evaluation of all rural development programmes in general and poverty alleviation

and employment generation schemes in particular, being implemented in various States / UTs.

It is well recognised that the success of the programmes largely depends on the effective delivery system and efficient implementation at the grass-roots level so that the programme benefits reach the rural poor in full measures. In order to ensure this, the Ministry has evolved a comprehensive multi-level and multi tool system of Monitoring and Evaluation for the implementation of its programmes. The Monitoring mechanism includes, inter-alia, the Performance Review Committee, Review meeting by the Ministers of Rural Development with the Chief Ministers / Ministers of Rural development and Officers of the States, the Area Officer Schemes, periodic progress reports, audit and utilisation certificates, video conferencing and field visits. The Ministry conducts quick evaluation / concurrent evaluation of all major programmes. Impact assessment studies to asses the overall impact of programmes of village-level are also conducted in selected districts. The Vigilance and Monitoring Committees at State and District-levels in all States / UTs to monitor the implementation of programmes are reconstituted. These Committees inter-alia include MPs / MLAs representatives of Panchayati Raj Institutions and NGOs. The Members of Parliament both Lok Sabha and Rajya Sabha have been assigned a Central role in the reconstituted V&M Committees and they have been nominated Chairman / Co-Chairman of the district level V&M Committees.

The Ministry has also taken initiatives to strengthen the monitoring mechanism and quality of implementation of programmes by introducing District Level Monitoring (DLM) System through external research organisation agencies, which include monthly reporting of physical and financial performance, qualitative reporting about policy and implementation environments in the district and physical vertification of the assets created under various programmes of the Ministry. With effect from 1st October, 2006, the DLM systems has been restructured and one combined system for the programmes of Development of Drinking Water Supply and the Programmes of Department of Rural Development (except PMGSY and NREGA) and Land Resources has been put in place. 466 districts of the country have been covered under DLM and 46 independent organisations have been engaged for this purpose.

This system aims at providing continuous, transparent and accountable monitoring inputs in reporting format with the objectives of reporting of the process and progress of the programmes covering different components of the programmes. It also aims at identification of gaps in the implementation at the village, block, district and state level. The monitoring system also elicits the stakeholders' views; assesses the institutional issues and document case studies and success stories on best practices, innovations and lesson learned.

In order to strengthen the monitoring mechanism, the Ministry of Rural Development has a panel of about 250 National Level Monitors comprising retired Defence Service Officers and Retired Civil Servants to monitor and furnish periodic reports to the Ministry on the implementation of programmes in selected districts including verifying facts of the cases and complaints if any, which may be referred to them.

24 Scientific and Technological Developments

INDIA has a long and distinguished tradition in science and technology from the ancient times with great achievements during the twentieth century. At the time of independence, our scientific and technological infrastructure was neither strong nor organised as compared to the developed world. This had resulted in our being technologically dependent on the skills and expertise available in other countries. In the past four decades, an infrastructure and capability largely commensurate with meeting national needs has been created minimising our dependence on other countries. A range of industries from small to the most sophisticated has been established covering a wide range of utilities, services and goods. There is now a reservoir of expertise well acquainted with the most modern advances in basic and applied areas that is equipped to make choices between available technologies, to absorb readily new technologies and provide a framework for future national development.

Science and Technology Infrastructure : Scientific and technological activities in India are carried out under a wide set-up consisting of Central Government, State Governments, higher educational sector, public and private sector industry and non-profit institutions/associations. These institutional structures, with their research laboratories, are the main contributors to research and development being carried out in the country. Notable among these are: the Council of Scientific and Industrial Research (CSIR); Indian Council of Agricultural Research (ICAR); and Indian Council of Medical Research (ICMR). In addition, there are many laboratories of various departments/ministries, viz. Department of Atomic Energy, Department of Electronics, Department of Space, Department of Ocean Development, Defence Research and Development Organisation, Ministry of Environment and Forests, Ministry of Non-Conventional Energy Sources and the Ministry of Science and Technology. Further, there are over 1,200 in-house research and development units in industrial undertakings supporting research in their respective industries. Many Indian Universities and Deemed Universities such as IITs also undertake substantial research and development work.

New Science and Technology Policy 2003 : In order to build a blue print for future programmes of Science and Technology and to give a direction to the initiatives to be undertaken, the Government announced the Science & Technology Policy 2003. The policy outlines the approach to S & T governance, optimal utilisation of existing physical and knowledge resources, development of innovative technologies, systems and technologies for mitigation and management of natural hazards, generation and management of intellectual property and creation of awareness amongst general masses about the use and benefits of science and technology.

DEPARTMENT OF SCIENCE AND TECHNOLOGY

The Department of Science and Technology, was set up in May 1971 with the objective of promoting research in new areas and to play the role of a nodal department for organising, co-ordinating and promoting science and technology activities in the country. Over the years, the Department has evolved policy statements and

guidelines, provided mechanisms for co-ordination in the areas of science and technology in which a number of institutions have interests and capabilities, supported grants-in-aid to scientific institutions and professional bodies. The Department has played a catalytic and co-ordinating role and in this process over the past few years, the efforts at promoting science and technology in the States and Union Territories have also gathered considerable momentum.

RESEARCH AND DEVELOPMENT PROGRAMMES

The Department of Science and Technology has been playing a crucial role in identifying and promoting front-line and priority areas on Research and Development (R&D) in various disciplines of science and engineering. This support is provided through Science and Engineering Research Council (SERC) - an advisory body consisting of eminent scientists and technologists drawn from academic institutions like IITs, universities, national laboratories and industry. The Council through its advisory committees, assists the Department not only in peer reviewing the proposals but also identifies newer and inter-disciplinary areas of R&D for concerted efforts. The Council, with the help of the advisory committees, also monitors progress of individual projects sponsored in various disciplines along with monitoring the progress of co-ordinated and concerted efforts. Every year around 1,000 project proposals are received for consideration in the Department, most of which fall in the category of basic sciences and engineering research.

Assessing the importance of the emerging, highly interdisciplinary field of Nanoscience and Technology, a national programme titled “Nanomaterials Science and Technology Initiative (NSTI)” has been started. The programme focuses at overall research and development in nanoscience and technology with vigour so that India can become a significant player in the area and contribute to the development of new technologies.

On the occasion of the 50th anniversary of India’s Independence, the Government launched Swarnajayanti Fellowships for enabling outstanding young scientists to attain world class levels in science. The Fellowships are open to Indian scientists in the age group of 30-40 years, with proven capability for outstanding research work exploring new frontiers in their field of specialisation.

Infrastructure Development : The Department through its various programmes has been playing a catalytic role in supporting the setting up of new R&D facilities along with the modernisation of the existing ones. ‘Intensification of Research in High Priority Areas’- IRHPA has helped in strengthening the infrastructure and research capabilities in selected areas of science and engineering. Under this programme, units/core groups and National Research Facilities are established around an outstanding scientist to act as a focal point to nucleate research activity in these areas.

Universities are cradles of innovation and research. In order to provide and improve basic infrastructure in academic sector for research and teaching a scheme viz. Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST) was initiated during the 9th Five Year Plan. Under this programme support is provided for up-gradation of laboratories by providing equipment, computer networking, library facilities, etc. The programme identifies active university/academic departments for support through a peer review mechanism including on-site visits.

Human Resource Development : The Department also supports different programmes aimed at identifying new talent and providing them with financial assistance in the form of fellowships for pursuing research in front-line areas of science and technology. Also, for the researchers the Department supports training programmes, summer schools and contact programmes. The programmes supported are: BOYSCAST fellowships, SERC student fellowships, etc. Fellowships are also awarded to undergraduate students to get first hand exposure to research in leading research laboratories. To involve young scientists (below 35 years) in national S&T development process and to provide opportunities to them for pursuing exciting and innovative research ideas an exclusive scheme for Young Scientists is being implemented by the Department.

In order to motivate bright young minds at their secondary school / college levels, and to encourage them to stick on to a career in science, a new scheme called Kishore Vaigyanik Protsahan Yojana has been initiated. Talent would be scouted through a competitive mechanism at school level and scholars would be selected for an attractive fellowship / scholarship until they pass their Masters Degree in Science. Further, in order to generate trained manpower in selected areas of science and technology, training courses, summer / winter schools were organised in theoretical chemistry, earth sciences, astronomy and astrophysics, lasers, optics, atomic and molecular physics.

Women Scientists Scheme was launched during the year 2002 by the Department of Science and Technology. The scheme provides support to women scientists, with or without a break in career, to pursue science in all its aspects and encourage them to continue in the scientific profession and also to contribute towards application of science and technology to societal development.

TECHNOLOGY DEVELOPMENT AND RELATED PROGRAMMES

The Department of Science and Technology under its scheme on “Drugs and Pharmaceuticals Research’ supports collaborative Research and Development projects jointly submitted by drug companies and the academic national R&D institutes. The programme aims towards the development of new drugs and cleaner process technologies for known drugs / key intermediates for drugs. The programme covers all systems of medicine - Allopathic, Ayurvedic, Homeopathic, Siddha and Unani. In addition, National Facilities essential to undertake R&D have also been set up under this programme. Specific mention may be made of the Medium Throughput Facility, Pharmacological Testing Facility and Centre for Pharmacokinetic and Metabolic Studies at CDRI, Lucknow, Immunomodulatory Potential Testing Facility at IICB, Kolkata; National Facility on Transgenic and Gene Knockout Mice at CCMB, Hyderabad; and National Centre for Bioavailability at National Institute of Pharmaceutical Education & Research, Mohali. So far 45 projects including 7 national facilities have been funded by creating industry–institutional alliances among 20 institutions (national labs. and universities) and 19 drug industries. The programme has resulted in the filing of 12 patents in India and abroad.

The Department has guided 24 socio-economic ministries in the setting up of Science and Technology Advisory Committees (STACS) for formulation of long / short-term joint technology development programmes. For coordinating the efforts of STACs and to take stock of activities of various ministries, the Department has also set up an Inter-Sectoral S&T Advisory Committee under the Chairmanship of Secretary, DST. A quarterly newsletter STAC SCAN is being brought out by IS-STAC to disseminate information.

The Department has been catalytic in identifying, formulating and implementing a number of technology development programmes with the help of industries and socio-economic ministries. Efforts of the Department in this direction have helped in initiation of multi-institutional programmes in the emerging areas of technology. As a part of this programme, projects were continued to be supported in the areas such as instrument development, advanced materials, critical technology, sugar technology, fly ash utilisation, advanced composites and in higher technical education.

The Department has set up an autonomous body – Technology Information, Forecasting and Assessment Council (TIFAC). The main objectives of TIFAC include generation of Technology Forecasting, Technology Assessment and Techno Market Survey (TMS) documents and enabling a Technology Information System. TIFAC has brought out more than 280 specialised reports covering most of the sectors of economic relevance, ranging from Agriculture to Advanced Sensors and from materials to biotechnology. These reports have also focused on the upcoming and frontier technologies like transgenic seeds, biochips, R-DNA products, transgenic animal models, surface engineering, etc. The reports provide a vision and options for technology trajectories for industries, institutions, entrepreneurs and experts. TIFAC has also brought out a series of reports giving a comprehensive picture of 16 areas of scientific research carried out in our country in the last 50 years.

TIFAC carried out a long-term Technology Vision (Forecasting) exercise known as "Technology Vision for India up to 2020" covering 17 sectors important to Indian economy. The reports include realistic technology road maps for achieving desired goals as well as intermediate milestones. A few of the recommendations of these reports are being implemented through projects in different sectors. This has resulted in follow-up actions on a limited scale towards demonstration projects of technology for wider replication in six identified sectors namely: Agriculture and Agro Food Sector, Road Construction and Transportation Equipment, Upgradation of Textile Machinery / Textile Industry, Health Care Services and Herbal / Natural Products, Upgradation of Science, Engineering and Professional Institutions relevant to Industry (Mission REACH), and Targeted Programmes in other important areas like Hydrogen Energy, Waste to Energy, Emerging Energy Sectors, Electric Power, Rural Connectivity, SMEs, etc.

Mission REACH has been launched by TIFAC with the objective of upgrading select science and engineering colleges so as to create Centres of Relevance and Excellence (COREs) in achieving new heights in selected institutions at par with the world's best. 26 such centres have been set up across the country on a wide range of emerging areas of relevance to industry and society. A unique feature and of these TIFAC-COREs is the very active participation of Industry in the form of training programmes, research projects and consultancy. Details of Institutions / Areas, etc. could be seen on www.missionreach.org .

A Patent Facilitating Centre (PFC) has been set up in TIFAC with the objectives of introducing patent information as a vital input in the process of promotion of R&D programmes, provide patenting facilities for scientists / technologists of the country on a sustained basis, keep a watch on developments in the areas of intellectual property rights, create awareness and understanding relating to patents and undertake studies and analysis of policy related to TRIPS Agreement and other agreements under World Trade Organisation, etc. The Centre has been organising awareness workshops to sensitise scientists / technologists from various universities,

government, R&D institutions and industries. The PFC has also brought out two CD ROM databases containing data from 1995. The website www.indianpatents.org.in provides comprehensive details of the service and facilities provided by the PFC. The PFC has also brought out a report on patenting of micro-organisms and has developed a video programme on patent awareness titled "Patents Made Easy".

To promote innovation among entrepreneurs, a new golden jubilee initiative called "Technopreneur Promotion Programme (TePP)" has been initiated and implemented jointly by TIFAC with DSIR. The main thrust of TePP is to tap the vast untapped innovative potential of the Indian entrepreneurs. The support is provided to projects of individual innovators towards scaling up the idea / invention / know-how / designs to working models / prototypes / pilot plants. Besides financial support, the endeavour is to link and couple them to the most appropriate existing R&D facilities and expertise; assist them in patent search / filing of patents; interface for tying-up with financial institutions for commercial exploitation, etc.

To encourage grass-root innovators, National Innovation Foundation (NIF) of India has been established with the main goal of providing institutional support in scouting, spawning, sustaining and scaling up grassroots level green innovators and helping their transition to self-supporting activities.

TECHNOLOGY DEVELOPMENT BOARD

The Technology Development Board was constituted in September 1996. The Board provides financial assistance to industrial concerns and other agencies for attempting development and commercial application of indigenous technology or adapting imported technology for wider domestic application. The areas that got financial assistance from the Board were health and medicine, engineering and electronics, chemicals and lubricants, agriculture and biotechnology, information technology, road / air transport, energy and waste utilisation, and telecommunication. The technology providers include national laboratories, academic institutions and recognised in-house R&D units in the industry. Some of the products successfully produced and marketed include first genetically engineered hepatitis B vaccine; bio-fertiliser from maize waist, gluten with the brand name Suryamin; DL2 Amino Butanol, an important substitute drug intermediate in the manufacture of anti-tuberculosis drug; Cefixime - an orally active fourth generation Cephalosporin anti-biotic; recombinant hepatitis B vaccine; CAL reagent for detection of bacterial endotoxin; carding machines for textile mills; Nicotinamide; Undecenoic Acid from castor oil; and fuel pellets from municipal garbage, etc.

The TDB instituted a 'National Award for successful commercialisation of indigenous technology' by an industrial concern to be given away on the Technology Day, i.e. 11 May every year commencing from 1999. The National Award consists of two components: (i) to the industrial concern which has successfully commercialised the indigenous technology and (ii) to the developer / provider of such technology. Each component carries a cash award of Rs. 2 lakh to be given to an SSI unit which has successfully commercialised a technology-based product.

NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES

The National Accreditation Board for Testing and Calibration Laboratories (NABL) provides formal recognition for technical competence of testing, calibration and

medical laboratories. NABL accreditation is primarily based on ISO / IEC 17025:2005 for testing and calibration laboratories and ISO 15189:2003 for medical laboratories. As on 31 May 2006 NABL had granted accreditation to 428 testing, 220 calibration and 68 medical testing laboratories.

The NABL accreditation system complies with ISO / IEC 17011:2004 and Asia Pacific Laboratory Accreditation Cooperation (APLAC) MR001. Based on evaluation of NABL operations by APLAC in 2000, NABL has been granted signatory member status by APLAC and International Laboratory Accreditation Cooperation (ILAC) under their Mutual Recognition Arrangements (MRAs). This status has been renewed up to 2008 based on re-evaluation of NABL in 2004. Under these MRAs, the reports issued by NABL-accredited laboratories are considered to be equivalent to reports issued by laboratories accredited by 54 accreditation bodies in 46 economies.

To complement its laboratory accreditation services, NABL plans to initiate accreditation programmes for Proficiency Testing Providers and Certified Reference Material Producers in the near future.

S & T PROGRAMMES FOR SOCIO-ECONOMIC DEVELOPMENT

The Department of Science and Technology is also devoted to evolving and implementing specific programmes to promote applications of S & T to improve the quality of life especially for the disadvantaged sections of the society. The areas in which significant achievements have been made are: setting-up of Technology Parks for women; low-cost housing and sanitation; integrated land water and cover management; eco-restoration and sustainable use of biomass in the hilly region; artisanal pottery; artisanal blacksmithy; artisanal leather tanning; training of agricultural labour (SC youth) in the use of modern agricultural appliances for improved agricultural productivity; farm-oriented low-cost technology for utilisation of Azolla as biofertilizer; developing livelihood base for tribals in Melghat region through watershed development, etc. Some of the tangible benefits of such programmes have been the generation of appropriate rural technologies, reducing drudgery, generating employment, improving health, and conserving environment. For socio-economic development of the north-eastern states including Sikkim, steps have been initiated to involve State S&T councils, NGOs and S&T personnel. A number of projects are being supported both in farming and non-farming sectors after identifying specific areas.

The National Science and Technology Entrepreneurship Development Board (NSTEDB) established in January 1982 has been implementing several schemes and programmes on promotion of entrepreneurship and creation of sustainable employment through the application of S&T. S&T persons are being trained under Entrepreneurship Development Programmes (EDPs) and Technology-based EDPs to equip them to set up their own ventures. The Board has also been organising skill development training programmes in various skill areas for providing sustainable jobs / self-employment opportunities to unemployed youth.

Science and Technology Entrepreneurship Parks (STEPs) have been set up in and around different S&T institutions in the country in order to provide facilities to existing as well as start-up entrepreneurs on technology development, testing and calibration, documentation and computation, training, etc. A scheme for establishment of Technology Business Incubators (TBIs) was launched in 2000-2001

to promote the growth of technology-based enterprises and to foster faster commercialisation of R&D results. TBIs are being established in and around academic and R&D institutions in the country. Entrepreneurship Development Cells (EDCs) have been established in academic institutions for creating facilities for the promotion of entrepreneurship and other avenues of self / wage employment among qualified S&T personnel. Science and Technology Entrepreneurship Development (STED) projects are in operation in backward districts. STED projects aim at establishment of micro-enterprises in the district of its operation. For those unable to join regular Entrepreneurship Development Programmes (EDPs), Open Learning Programmes in Entrepreneurship (OLPE) was initiated in 1994-95 in collaboration with Entrepreneurship Development Institute of India (EDII), Ahmedabad. The Board has launched a comprehensive website www.techno-preneur.net which gives detailed information on several aspects of entrepreneurship development. A monthly e-zine entitled “Science-Tech Entrepreneur” is being brought out by the Board for dissemination of useful information among upcoming and existing entrepreneurs.

NATURAL RESOURCES DATA MANAGEMENT SYSTEMS

The Natural Resources Data Management programme is being implemented to upgrade the existing data management methodologies at the district level to facilitate decision making process with regard to local area management and development. Launched in 1982-83, the programme involves several R&D institutes of national repute, universities and non-governmental agencies in a consortium mode. As a part of this programme, spatial and non-spatial databases are being generated and updated at the state and district GIS centres. Different modules of Geo-Referenced Area Management (GRAM) software package are being developed to assist the information processing needs of the district and sub-district level planning. The programme also envisages developing and demonstrating the use of GIS technology through specific decision support systems for the identified sectors, viz. water conservation, land use planning, energy management and infrastructure development. Several R&D projects in the areas of land and water management, study of landslides and hydrology of small watersheds were also supported.

NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI)

NSDI was initiated in the year 2000 in R&D mode to provide collated Geo-Spatial data to user community. Over the period, NSDI policy framework was formulated and organisational structure was provided. The Government approved creation of NSDI in June 2006.

The NSDI is an infrastructure for the availability of and access to organised spatial data. Use of the infrastructure is at local, community, city, regional and national levels for sustainable developments. India, has over the past years, produced a rich “base” of map information through systematic topographic, geological, soil and cadastral surveys, various natural resources inventory programmes and the use of the remote sensing images. Further, with the availability of precision, high resolution satellite images, data enabling the organisation of Geographical Information System (GIS), combined with the Global Positioning System (GPS), the accuracy and information content of these spatial datasets or maps is extremely high.

The NSDI has an overarching frame work for the existing data generating agencies with the authority to mandate their constituent agencies to commit their

data resources and generate new data / products / services on the basis of user needs. NSDI will create a reliable and supportive environment to access geographically related information using a minimum set of standard practices, protocols and specifications. It will facilitate stakeholders: Government, Corporate Sector, NGOs, Community Organisations, Academia, Research Community and Citizens in accessing the collated datasets.

STATE S&T PROGRAMME

The Department of Science and Technology has been operating a scheme entitled 'Assistance for Development of State Councils on Science and Technology' since 1980. The main objective of the scheme is to assist States and Union Territories in setting up State Councils on Science and Technology which in turn could help the states in formulation, planning, co-ordination and promotion of S&T activities within their areas. The State Councils on Science and Technology have been set-up in all States and UTs. The State Councils have now reached a phase of programme-based S&T cooperation to address location-specific and region specific problems. Steps were initiated to formulate studies on health care, traditional artisanship, agricultural practices, etc. to identify and plan S&T intervention. Steps were also initiated to help the State Councils to encourage replication of successful technologies developed by them.

SCIENCE COMMUNICATION AND POPULARISATION

The National Council for Science and Technology Communication (NCSTC), ever since its inception some 18 years ago, has been engaged in science and technology communication / popularisation and inculcation of scientific temper among the people. The emphasis has been on the development, adaptation, promotion and use of different communication technologies and techniques utilising various media - traditional and non-traditional. The activities undertaken centred around a few natural phenomena and specific events utilising these for S & T communication.

The National Children's Science Congress is an important activity involving children in the age group of 10-17 years from all over the country. The programme is envisaged to encourage the students to relate the learning of science to the environment around, to their immediate social and physical environment and provide them a forum to interact with scientists to quench their curiosity and thirst for creativity. In this programme, children in teams of five each on an average take up scientific projects related to the local issues, work under the guidance of teachers / science activists, and report their findings at school / block, district, state and national level congress.

A programme has been developed for promoting voluntary blood donation in the country with the objective of meeting the near total requirement of blood from healthy voluntary donors. Bibliographies of popular science books in different Indian languages published during the last 150 years have been compiled. To create awareness on issues of environment and sustainable development several resource persons have been trained to organise activities for co-ordinators of school science clubs and activities of S&T based voluntary organisations.

Year 2004 was declared as the year of Scientific Awareness by the Government. Vigyan Rail, Scientific Jathas, interaction of scientists with common man were some of the activities taken up to celebrate the year of scientific awareness. An extended run of Vigyan Rail and Vigyan Mail (Science and Technology Exhibition on wheels) was done in 2005 to cover a few selected smaller towns throughout the country.

Vigyan Prasar : Vigyan Prasar was established in 1989 to take up large scale science popularisation programmes. It has been striving hard to reach out to masses through the mass media. Besides, efforts are underway to put together a network of Science Clubs for spreading scientific awareness and promoting use of scientific methodology in our lives.

S&T RESOURCES INFORMATION

The Department of Science and Technology makes available on a continuous basis information on both manpower and financial resources devoted to science and technology activities. The directory of R&D institutions in India being brought out regularly covers names and addresses of R&D institutions under Central government, State governments, in-house R&D units of public sector and private sector industries, universities including deemed universities and institutes of national importance, and scientific and industrial organisations in the private sector.

The database on extramural research and development projects funded by different Central government agencies is being maintained and updated regularly. The data is being utilised to compile the Directory of Extramural Research Projects.

INTERNATIONAL CO-OPERATION

International Science and Technology co-operation is realised at three levels, viz. bilateral co-operation with developed and developing countries, regional co-operation such as with SAARC, ASEAN and BIMST countries; and multilateral co-operation through NAM Science and Technology Centre, COSTED, UNESCO, etc. India has got bilateral science and technology co-operation with 56 countries. Suitable mechanisms have been established with conclusion and implementation of programmes of co-operation with Bangladesh, Belarus, Brazil, Bulgaria, China, Cuba, Egypt, France, Germany, Hungary, Indonesia, Iran, Israel, Italy, Japan, Kazakhstan, Malaysia, Mexico, Myanmar, Poland, Republic of Korea, Romania, Russian Federation, Singapore, Sri Lanka, South Africa, Tunisia, Ukraine, UK, USA, Uzbekistan and Vietnam.

An Integrated Long Term Programme of Co-operation in Science and Technology between India and Russia is the major interaction instrument between the two countries. Indo-French Centre for Promotion of Advanced Research (IFCPAR) is one more initiative between India and France for promotion of collaborative research in advanced areas of fundamental and applied science and technology. A major bilateral programme in the form of Indo-US Science and Technology Forum has been launched. A new project-based personnel exchange programme with German Academic Exchange Service (DAAD) is being implemented.

Indian scientists have conducted experiments in the fields of crystallography, condensed matter physics, high energy scattering, solid x-ray spectroscopy, nuclear resonant scattering, magnetic compton studies, etc., and received advanced training and international research facilities under various international Science and Technology co-operation programmes.

Under international science and technology co-operation programme the following Joint R&D Centres have been established: Indo-Russian Research Centre in Advanced Computing at Moscow; International Advanced Research Centre for Powder Metallurgy (ARC-I) at Hyderabad; and Indo-Uzbek Centre for Medical

Applications of Low Level Lasers for treatment of Tuberculosis and allied diseases at New Delhi.

A number of collaborative national programmes, viz. design and development of INDUS-I and INDUS-II synchrotron radiation sources at Indore with Russian collaboration; characterisation of Ladakh (Hanle) site for installation of the 2-m telescope and setting up of 14 GFLOP computer at Indian Institute of Astrophysics, Bangalore for N-Body simulations with Japanese experts; Development of gamma ray telescope at Mount Abu with Russian collaboration; a plant for production of 100 million doses of oral polio vaccine (OPV) at Bulandshahar with Russian collaboration; and superconducting cyclotron and cryogenics at VECC, Kolkata have been established.

Initiatives have been taken with Indian diaspora to mobilise the skills and expertise of Indian scientists and technologists working abroad. A dedicated website (http://stio.nic.in) for registration of Scientists and Technologists of Indian Origin Abroad (STIO) as well as to receive their offers to share their expertise and/or to join Indian S&T initiatives has been put up.

METEOROLOGICAL SERVICES

The India Meteorological Department (IMD) was established in 1875. It is the National Meteorological Service and the principal Government agency in all matters relating to meteorology, seismology and allied subjects. The Department has units all over the country engaged in collecting meteorological and seismological data besides providing various meteorological services. Its main objective is to provide meteorological information for weather sensitive activities like aviation, shipping, agriculture, irrigation, off-shore oil exploration and industries. The Department also issues warning against severe weather phenomena like cyclones, dust storms, heavy rains, cold and heat waves that cause destruction of life and property. Besides, it also provides climatological information, records earthquakes and promotes research in meteorology. The Department maintains an extensive network of modem observatories and communication links all over the country. Observations received through high power radars and weather satellites are extensively used these days for analysis and prediction of weather.

India launched a geostationary meteorological satellite METSAT in September 2002, and re-named it KALPANA-l. Another geostationary (multipurpose) satellite INSAT-3A was launched in April 2003. Meteorological Data is being received from Kalpana INSAT -3A and NOAA Series of Satellites for Meteorological Analysis and Weather forecasting apart from generating hourly cloud imagery, INSAT Meteorological Data Processing System (IMDPS), producing the following products from the data received:

- Cloud Motion Vector (CMVs).
- Sea Surface Temperatures (SSTs).
- Outgoing longwave Radiation (OLR).
- Quantitative Precipitation Estimates (QPE).

A National Satellite Data Centre (NSDC) was commissioned w.e.f. October 2005 for the archival and supply of INSAT imageries and desired products to the users and research community through a Web portal.

For dissemination of Cyclone Warning to various State Governments, Port

Officials, etc. 252 analogue and 100 digital Cyclone Warning Dissemination System Receivers have been installed in the Cyclone prone areas of east and west coasts.

The IMD has a network of 40 RADARS installed throughout the country. Under modernisation scheme of RADAR network, one S-Band Doppler Weather Radar Metero 1500S imported from Germany was installed at Visakhapatnam. Three Doppler Radars are already functioning round-the-clock at Chennai, Kolkata and Machilipatnam. Proposals for replacing four old and obsolete radars by new Doppler Weather Radars at Bhuj, Kochi. Mumbai and Paradeep have been approved by Council of Meteorological and Atmospheric Sciences.

The India Meteorological Department is maintaining 51 seismological observatories under the national network to monitor the seismic activity in and around the country. Of these, twenty-four seismological observatories were upgraded with state-of-the-art digital broadband seismograph systems and modern communication facilities. A Central Receiving Station (CRS) and a National Seismological Data Base Centre (NSDC) have been established at New Delhi to receive, analyse and systematically archive the seismic data. In operational mode, the Centre is responsible for quick determination of earthquake parameters and dissemination to various user agencies. Recently, a 16 element VSAT-based digital telemetry seismograph station network with a central receiving station at New Delhi was established for close monitoring of seismicity of the region.

The IMD continues to participate in multi-disciplinary scientific cruises of Ocean Research Vessels in the Arabian Sea, Bay of Bengal and Indian Ocean, etc. during pre-monsoon, monsoon and post-monsoon periods. These cruises are planned to collect meteorological data over the adjoining sea areas for the study of various aspects of monsoon circulation and other important weather systems affecting the country and also to validate satellite data of meteorological parameters on board the Indian Remote Sensing Satellite (IRS P3) as and when required.

The first operational Long Range forecast of seasonal southwest monsoon rainfall (June-September) of India was issued by IMD in 1986. IMD has developed new long range forecast models which were introduced in 2003.

The Crop Yield Formulation Unit of the Department has developed statistical models using correlation and regression techniques to forecast crop yield on operational basis for 26 sub-divisions growing kharif rice and for 16 sub-divisions growing wheat. Based on these models, pre-harvest monthly crop yield forecast for kharif rice are being prepared for every year from August to December and for wheat from January to May.

IMD has also installed 250 Cyclone Warning Dissemination Systems (CWDS). This is unique in the world and helps in direct broadcast of Cyclone warning to the public in general and coastal authorities in particular. Currently 100 more Digital Cyclone Warning Dissemination Systems (DCWDS) are being installed along Andhra Coast.

IMD publishes its quarterly journal MAUSAM, annual publications of Indian Astronomical Ephemeris, Rashtriya Panchang in 13 languages and Sunrise, Sunset, Moonrise and Moonset tables are brought out by the Positional Astronomy Centre, Kolkata.

The National Centre for Medium Range Weather Forecasting (NCMRWF) has been a leading centre in India for all weather and climate model-related research and operation. This is the only organisation in India where real-time global and

regional data assimilation works are being carried out for providing operational medium-range weather forecasting. NCMRWF also renders Agro Advisory Services (AAS) to the farming community of India. International standard research on all aspects of data assimilation, global / regional modelling, extended-range / seasonal prediction, climate variability and Crop Weather Modelling are carried out by the scientists of the Centre.

Utilisation of satellite data is crucial to improve the quality of weather forecasts. Scientists at NCMRWF develop new and innovative methods to utilise data from every satellite that provides weather information. The Centre also provides input to space agencies on the weather sensors of satellites. Improving the global model physics and global model resolution are the areas in which NCMRWF has the strongest competence. High-resolution regional models are run every day at NCMRWF to supplement the operational high-resolution global model (T170 / L28) outputs. For this purpose, the Centre has the most powerful super-computing facility in India. NCMRWF provides information on impending weather four to seven days in advance to ensure optimum effectiveness of modern farming practices. Weather forecast bulletins are disseminated biweekly to AAS units via fax or internet / e-mail. Currently 71 units are linked with the Centre through this facility. Weekly forecast bulletins are issued to 107 AAS units. District level forecasts have also started recently.

NCMRWF gives special focus for weather and climate prediction for mountainous regions. For this purpose, high-resolution mesoscale model (MM5) is run operationally specific to the Himalayan region. The Centre runs a global ocean wave model to predict wave heights, peak wave direction and period. The Centre provides its routine and special products to other organisations such as the India Meteorological Department, Indian Military, Indian Navy, Snow and Avalanche Study Establishment, Indian Space Research organisation, Bhaba Atomic Research Centre etc. on a regular basis and on their special request. In addition, the user community also includes power sectors, water resources, shipping and fisheries, transportation, etc., where customised forecasts are given.

NCMRWF has many National and International collaborations with various Institutes and Organisations. NCMRWF also hosts the BIMSTEC (Bay of Bengal Initiative for multi-sectoral technical and economic co-operation) Centre for Weather and Climate. This Centre aims at addressing and coordinating weather and climate-related issues of the member countries. NCMRWF imparts training to young researchers as well as the user community from time to time. NCMRWF has also been a partner on every observational campaigns (INDOEX, BOBMEX, LASPEX, ARMEX, etc) undertaken in India to better understand and model the atmospheric processes.

SURVEY OF INDIA

Survey of India (SOI), the national survey and mapping organisation under the Ministry of Science & Technology was set up in 1767. In its assigned role as the National Principal Mapping Agency, Survey of India bears a special responsibility to ensure that the country's domain is explored and mapped suitably to provide base maps for expeditious and integrated development and ensure that all resources contribute their full measure to the progress, prosperity and security of India. The primary responsibility of SOI is to maintain topographical map coverage on 1:250 K, 1:50K and 1:25 K scales. The topographical map coverage on 1:250 K and 1:50 K

scales covering the entire country have been completed and the map sheets are being updated at regular intervals to depict latest spatial information. Surveys on 1:25 K scale are being taken up as a national requirement keeping in view the priorities indicated by the Central / State governments and other user agencies.

Besides, being grouped under “Scientific Surveys” in Government of India Business Rule 1971, it has also been called upon extensively to deploy its expertise in the field of geodetic and geophysical surveys, study of seismicity and seismotectonics, glaciology, participation in Indian Scientific Expedition to Antarctica and projects related to digital cartography and digital photogrammetry, etc. to provide basic data to keep pace with Science and Technology Development. SOI has undertaken creation of Digital Cartographic Data Base of Topographical maps on various scales. The digital data is being used by various agencies for planning and GIS applications. It also undertakes large scale surveys for various developmental projects including hydro-electric, irrigation, command area, canal area, cantt. area schemes, etc. The Department is responsible to fix the external boundary of India, their depiction on maps published in the country and also advise on the demarcation of inter-State boundaries.

The Survey of India also provides support to neighbouring countries, e.g. Nigeria, Afghanistan, Kenya, Iraq, Nepal, Sri Lanka, Zimbabwe, Indonesia, Bhutan, Mauritius, etc., in the field of survey education, transfer of technology and various other surveying technologies under bilateral arrangements.

In the recent time, a Task Force chaired by the Surveyor General of India has prepared a ‘Discussion Document’ on the establishment of a National Geospatial Data Infrastructure which had been endorsed by the workshop on NGDI held at New Delhi during February 2001. Survey of India with its vast storehouse of Geospatial data, will serve as the engine for the NGDI. The creation of NGDI framework will provide the necessary facilities and structure of relationships among the data producers and users that will facilitate data sharing. The enlightened policy to share data on common standards and networks will, in turn, serve as a stimulus for growth. Survey of India in collaboration with sister data producing agencies plans to assume the leadership role in meeting social needs through the NGDI.

Survey Training Institute, Hyderabad established under UNDP assistance is a premier institution for training in various disciplines of surveying and mapping to the trainees sponsored by the department, other State / Central Government Organisations and neighbouring countries. It is proposed to modernise the institute by entering into collaboration agreements with institutions of repute abroad like ITC Netherlands.

The Great Trigonometrical Survey Triangulation Network of India and adjacent countries was started in the year 1802. Survey of India celebrated 200 Years of the ‘Great Arc’ – the greatest measurement of the earth ever undertaken, initiated 200 years ago, is considered to be one of the most stupendous works in the history of science. The ‘Great Arc’ exhibition was organised in U.K. in 2003 and pictorial publication and films specially made on Great Arc and the Surveying Traditions of Survey of India were released on this occasion.

A new Map Policy has been approved for dissemination of digitised maps to various users.

National Atlas and Thematic Mapping Organisation : While Survey of India meets the national needs in cartography, some specialised thematic maps required

to meet the needs of the specific users are taken care of by the National Atlas and Thematic Mapping Organisation (NATMO), operating under the Department. It also concentrates its attention in a number of areas to integrate resource maps with other relevant socio- economic data and represent them in spatial forms, useful for developmental planning. NATMO is trying to develop the new technology of reverse printing for NATMO maps on experimental basis. It is also trying to introduce the technique of using metallic colours in map printing. These facilities are also being modernised.

AUTONOMOUS SCIENTIFIC INSTITUTIONS

The Department of Science and Technology provides grants-in-aid to the following 18 autonomous scientific research institutions engaged in frontier areas of research in basic and applied sciences: (i) Bose Institute, Kolkata is devoted to fundamental and applied research in physical and life sciences; (ii) Agharkar Research Institute, Pune - research in basic and applied aspects in the fields of biological sciences; (iii) Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram - developing biomedical engineering and technology; providing and demonstrating high standards of patient care in advanced medical specialities and developing post- graduate training programme of the highest quality in these fields; (iv) Indian Association for the Cultivation of Sciences, Kolkata - studies on solid state physics, material sciences, theoretical physics, spectroscopy, energy research, chemistry including biological chemistry, polymer science, etc.; (v) Indian Institute of Tropical Meteorology, Pune - functions as a national centre for basic and applied research in tropical meteorology; (vi) Indian Institute of Astrophysics, Bangalore - research in emerging as well as interdisciplinary areas of astrophysics and heavenly bodies, and development of instruments used in astrophysical studies; (vii) Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore - research in frontier areas of chemistry, physics of materials, computational fluid dynamics, geodynamics, condensed matter theory, animal behaviour, genetics, etc : (viii) Raman Research Institute, Bangalore - research in basic sciences such as astronomy, astrophysics, liquid crystals, etc; (ix) S.N. Bose National Centre for Basic Sciences, Kolkata- promoting advanced studies in selected branches of basic sciences; (x) Birbal Sahni Institute of Palaeobotany, Lucknow - research in the area of palaeobotany, its relevance in modern context, (xi) Indian Institute of Geomagnetism, Mumbai - observing and understanding some of the physical processes taking place in the innermost crusts of the earth as well as phenomena occurring on the sun and in near earth and interplanetary space; (xii) Wadia Institute of Himalayan Geology, Dehradun - basic research in areas of biostratigraphy, petrology and geochemistry, sedimentology, tectonics and environmental geology to understand the geodynamics of the Himalayan region; (xiii) International Advanced Research Centre for Powder Metallurgy and New Materials, Hyderabad - the development of high performance materials, and processes; (xiv) Technology Information Forecasting and Assessment Council, New Delhi; (xv) Vigyan Prasar, New Delhi; (xvi) National Accreditation Board for Testing and Calibration Laboratories, New Delhi; (xvii) Centre for Liquid Crystal Research, Bangalore and (xviii) Aryabhatta Research Institute of Observational Sciences (ARIES), Nainital.

The DST also extends financial and administrative support to the following academies and professional bodies which are engaged in the promotion of S&T in the country through the involvement of scientists and engineers; (i) Indian Academy

of Sciences, Bangalore; (ii) Indian National Science Academy, New Delhi, (iii) Indian National Academy of Engineering, New Delhi; (iv) National Academy of Sciences, Allahabad and (v) Indian Science Congress Association, Kolkata.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

The Department of Scientific and Industrial Research (DSIR), a department under the Ministry of Science and Technology operates a scheme - Technology Promotion, Development and Utilisation (TPDU) Programme and is the administrative Department for Council of Scientific and Industrial Research (CSIR) and two public enterprises, viz., National Research Development Corporation (NRDC) and Central Electronics Ltd. (CEL).

TECHNOLOGY PROMOTION, DEVELOPMENT AND UTILISATION (TPDU) PROGRAMME

In the tenth Plan scheme - TPDU Programme was evolved after merging the ninth plan schemes on Research and Development by Industry (RDI), Programme Aimed at Technological Self Reliance (PASTER) and Scheme to Enhance the Efficacy of Transfer of Technology (SEETOT) including Asian and Pacific Centre for transfer of Technology (APCTT).

The TPDU Programme essentially endeavours to encourage industry to increase R&D expenditure, support a larger cross section of small and medium industrial units to develop state-of-the-art globally competitive technologies of high commercial potential, catalyse faster commercialisation of lab-scale R&D, enhance the share of technology-intensive exports to overall exports, strengthen industrial consultancy and technology management capabilities and establish user friendly information network to facilitate scientific and industrial research in the country.

TPDU comprises six component programmes, viz. Industrial R&D Promotion Programme; Technology Development and Innovation Programme; Technology Management Programme; International Technology Transfer Programme; Consultancy Promotion Programme; and Industrial R&D and Technology Information Facilitation Programme.

NATIONAL RESEARCH DEVELOPMENT CORPORATION

The National Research Development Corporation (NRDC) was established in 1953 as a commercial company for promotion of inventive activity in the country and translating Research and Development (R&D) results into marketable industrial products, processes and services. The Corporation, a public sector enterprise, plays a catalytic role in commercial applications of indigenous and foreign R&D results by transfer of technology from laboratories to industries.

NRDC is a one stop provider of comprehensive business services, devoted to satisfying the needs of the technology supplier on the one hand and the technology recipient on the other hand. NRDC works in close conjunction with over 200 Indian R&D institutions / universities and has licensed over 2,000 technologies for commercial exploitation, of which nearly 1,000 are in production in India and abroad.

NRDC also guides and assists the entrepreneurs in realising their technical business plans. The portfolio of activities include: arranging financial assistance for development of technologies in priority areas; providing IPR protection and IPR consultancy services; carrying out market surveys; preparation of project reports / business plans; arranging turnkey projects abroad based on Indian technologies;

licensing foreign know-how to Indian clients; assisting export marketing of products of licensee companies, etc.

CENTRAL ELECTRONICS LIMITED

The Central Electronics Ltd., (CEL) holds a unique position among public sector enterprises in electronics with emphasis on indigenous technology specifically in the area of renewable energy products through the Solar Photovoltaic route the strategically critical military components and sub-systems.

The Company is operating in three thrust areas. One thrust area is in the PV related renewable energy products, which have been certified by the European Commission. PV products manufactured by the company have the potential to address the high demand in the European market in addition to that in the domestic market.

The second thrust area is in the field of railway signalling products. The company has successfully designed and developed signalling equipment as per European standards for deployment in the Indian Railway Network.

The third thrust area is in militarily strategic components and subsystems for Phased Array Radars. The Phased Array Radars are deployable not only in the Akash Missile Programme, but also as Weapon Locating Radars.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

CSIR is a multi-disciplinary, multi-locational set-up comprising 38 national laboratories and 39 outreach centres. Its overarching objectives are to achieve excellence in science; global competitiveness in technology based on high science; and innovation in all spheres of activities from science to technology, management to financing. CSIR has been an active provider of technologies for industrial competitiveness, S&T base for strategic sector, technology for societal welfare and science for advancement of knowledge.

In the area of Aerospace Science and Technology : CSIR has been a pioneer in the area of aerospace science and technology. It has over the years not only developed a few strategic materials and processes but also has provided several high value services, such as: development of low cost carbon fibres and some variants of the pressure sensitive paints, two of which withstood 50 blow downs in the NAL high-speed wind tunnel without any performance deterioration; development of hexagonal boron nitride components for strategic applications such as Hall Effect thruster assembly for spacecraft propulsion; development of numerical techniques for modelling multiple damages in smart composites; and demonstration of fabrication techniques for manufacture of glass epoxy composites (flat and cylindrical) using combination of braiding and resin injection. Algorithms for on-line flight data / path reconstruction and parameter estimation, multi sensor and multi target tracking and fusion, and simulation studies on Air Traffic Models for Airports like Bangalore International Airport and Cochin International Airport have also been carried out.

In the area of Biology and Biotechnology : CSIR has made a marked presence through high quality of research output, including basic studies, industrial processes and products. Its scientists reported the crystal structure of the denylation domain of the M. tuberculosis LigA with bound AMP for the first time. A new vector system for the anti-rabies vaccine in tobacco plant has been developed, which produces a protein that induces a protective immune response in mice. Likewise, a new

diagnostic system, using O-AcSG and anti-achetenin-H antibodies, for diagnosis of childhood acute lymphatic leukemia; Lamin A cDNAs with disease-causing mutations expressed as green fluorescent protein (GFP)-tagged constructs in cultured cells; a low-cost and simple-to-operate multiutility portable distillation unit 'CIM-ASVIKA' useful for the farmers in rural areas and small scale entrepreneurs; a unique and novel process for the synthesis of 4-vinylphenols in microwave curtailing and two-step process into a single step in an environment friendly manner; a unique software tool named as 'SEAPATH' specially designed to overcome functional problems for prediction of virulent proteins; a reproducible, high throughput (survival 90 per cent) micropropagation protocol of Swertia chirata from axillary shoot proliferation established utilising shoot tips and nodal explants have been developed and reported.

In the area of Chemical Technology : CSIR has traditionally been very active in this area. It has to its credit, during the year, the improved process for the preparation of MgO of high purity (>99 per cent) from salt bitterns via intermediate formation of $Mg(OH)_2$ obtained from the reaction of $MgCl_2$ and lime, albeit indirectly, i.e. $MgCl_2$ is first reacted with NH_3 in aqueous medium and the slurry is then filtered with ease; development of a simple, compact and economically viable Molecular Beam Instrument (MBI), an Ultrafiltration membrane with pores too small to permit viruses and bacteria, and self-assembled Nanotapes of Oligo (p-phenylenevinylene).

In the area of Earth Science and Technology : Some interesting studies to result in this area were LPG gas hydrates with about 80 per cent synthesised; wide band (1000 Hz - 0.001 Hz) magnetotelluric (MT) studies to estimate the possible presence of potential geothermal resources; total rare earth elements (REE) abundance in a 5 m long sediment core from the Central Indian Ocean Basin which show nearly two-fold increase (167-314 ppm) with the core depth and strongly co-varies with Mn, Ti, P and smectite content; studies suggesting that the Ce-anomaly of bulk sediments as an indicator of paleo ocean bottom water redox conditions needs to be used with caution.

In the area of Ecology and Environment : Over the years, CSIR has made significant contributions in this area and has reported the development of a cost-effective two-phase biomethanation process for municipal waste and process of windrow-composting by adopting different aeration mechanisms in the windrows (aeration from the bottom, aeration from the sides aided by perforated GI pipes, etc.) for Municipal Solid Waste. An innovative process for conversion of oxides of aluminum-silicate mineral system to hydroxylated structures under atmospheric condition on making cementation materials has been developed for cost-effective green technologies for utilisation of various solid wastes in manufacture of building constructure materials, ceramic, and heat and acid resistance products.

In the area of Electronics : In this area, using 99.5 per cent alumina a radio frequency (rf) window has been designed and fabricated and a 980nm 14 PIN packaged pump laser module developed which is a vital component of C-band amplifier. Some other notable developments are ISFET-based glucose biosensor; technique for sorting of plastic waste for recycling; an inexpensive clinical chemistry analyser; simple method for making interferometric moire pattern encoded security holograms and Night Driving Filter specifically made for use in the automobiles during night driving.

In the area of Food : Studies have been reported on the quantitative and qualitative distribution and assessment of carotenoids in different body components of one

species of shrimp (Parapenaeopsis stylifera) harvested from shallow waters off the Indian coast. The propensity of fresh garlic powder to attenuate incidence of embryopathy and oxidative stress in pregnant rats rendering diabetic (steptozotocin induced) during the early gestation period as well as the beneficial consequences against oxidative damage in fetal tissues has been established. A new concept of mixed solutes as osmotic agent to overcome the problems of cross contamination of osmotic agent into the fruit juice introduced.

In the area of Health : This area of research has reported many significant leads such as: a substance isolated from the leaf of the betel plant (piper betel) which is able to induce death of cancer cells in chronic myeloid leukemia (CMK) - a type of cancer that attacks white blood cells, and development of process for the Oral Delivery of Insulin and Hepatitis B vaccine. A comparative economic method has been developed which helps to identify non-active site (structural determinants) of proteins as drug targets. A crude extract, obtained by the enzyme-acid hydrolysing process from a marine organism (mussel) which shows initially a potent anti-malarial activity, a least when examined for in vitro cultures of Plasmodium falciparum in human erythrocytes has been reported. Another significant lead has been the development of Gelatin micro spheres and evaluation of SSD loaded Collagen membranes for wound healing. It was found that wound healing is accelerated by 60 per cent. It has also been reported for the first time that hyaluronate lyase has an oligomeric structure. A process for high-level production of recombinant Staphylokinase was developed and licensed. Isolation of a bacterium (Bacillus sp.) that lives under extreme environmental condition and produces an aspartic protease inhabiter (ATBI) has been reported.

In the area of Housing : A fibre optic sensor-based structural health monitoring system has been developed for predicting the time-dependent losses in prestressing steel and evaluating the stress condition of concrete in the beam. A process has been developed to utilise ceramic and pottery waste as intermediate aggregate for cement concrete.

In the area of information : Two of the CSIR journals, namely Indian Journal of Traditional Knowledge (IJTK) and Medicinal and Aromatic Plants Abstracts (MAPS) have been included in the coveted list of 'Prior Art Journals' used for prior art search before grant of patent(s) by the International Search Authorities. There has been a steady increase in the subscriber base (20 per cent per annum) and many of the CSIR journals are covered by the Science Citation Index and have an impact factor varying from 0.087 to 0.509. Significant progress has been achieved in the ongoing project. 'Traditional Knowledge Digital Library' and a large number of formulations have been covered.

In the area of Materials and Engineering : Several technologies have been developed in this important R&D area which include development of water treatment for the removal of arsenic and suspended particles such as iron; 10 HP small tractor useful for small farmers; fabrication of Abased metallic glasses through evolution of Nano-phases; a novel process to produce nanomaterials on commercial scale; a new and novel technique to synthesize Silicon Carbide fibres by employing alkoxides as silica source and polymer or pitch as carbon sources; process to prepare blue light emitting long decay / persistence phosphor (persistent time as long as 6-8 hrs.) excitable with ambient light; and online Terafil water filter to supply clean drinking water at a high flow rate to the household.

New Millenium Indian Technology Leadership Initiative (NMITLI) : NMITLI is perhaps the largest proactive program in the country to boost R&D in public-private-partnership mode. It seeks to catalyse innovation-centred scientific and technological developments as a vehicle to attain for Indian industry a global leadership position, in selected niche areas, in a true 'Team India' spirit. The best competencies of publicly funded R&D institutions, academic and private industry are synergised for the purpose. NMITLI has developed and operationalized 42 projects, which cover diverse areas and involve 287 partners (222 in the public sector and 65 in the private sector).

NMITLI is able to create an unique brand for itself by flagging some S&T successes which include: (i) development of formulations: one each for psoriasis, diabetes, arthritis and hepatic disorders following 'Reverse Pharmacology' approach - wherein modern science inputs are provided to age old traditional medicine knowledge to develop modern medicine. The antipsoriatic formulation is under Phase-II Clinical Trials while the other three are under Phase-III Clinical Trials. The approach provides unique advantage in terms of reduced cost and time for drug development and ultimately lower cost to the patient; (ii) Lysostaphin - a novel biotherapeutic molecule for Staphylococcus infections - for which an Investigational New Drugs (IND) application has been cleared. The formulation will now be taken for Phase-I clinical studies; (iii) a 129 node parallel supercomputer (256 giga flops) with indigenously developed customised communication device (Optical FloSwitch) and a new weather prediction code (Varsha 1.0) which includes algoprithm more appropriate for the tropics. This integrated NMITLI weather prediction platform would enable India to make improved weather predictions; (iv) advanced bio-informatics software such as BioSuite, BioCluster and Darshee. Other NMITLI projects in this area would enable India to become a global player in the area of bio-informatics; and (v) for leather, an environment friendly bioprocessing route as opposed to currently practised, highly polluting chemical route - this would lead to a paradigm shift in age old leather processing.

Human Resource Development : CSIR is committed to develop and nurture S&T manpower at the national level. It also promotes, guides and co-ordinates scientific and industrial research through scientific projects at the national level. Some of the activities are Award of Shanti Swarup Bhatnagar Prizes (SSB) and CSIR Young scientist Awards (YSA); Selection of Junior Research Fellows (JRF) through National Eligibility Test (NET); Selection of Senior Research Fellows (SRF), SRF Extended Research Associates (RA), Senior Research Associates (SRA) and Shyama Prasad Mukherjee Fellows (SPMF); Funding of Extramural Research (EMR) Schemes at universities / R&D organisations; Visiting Associateship Scheme; Travel / Conference / Symposium grants; and CSIR Program on Youth for Leadership in Science (CPYLS). In this particular year CSIR has provided support to approximately 7500 Research Fellows / Associates in different branches of Science and Technology, 120 Emeritus Scientists, 186 Pool Scientists, etc.

CSIR has established a Human Resource Development Centre to create a focus group of human resource development both at the Centre and in each laboratory. The centre is executing its objectives by promoting a professional and holistic human resource management in CSIR by imparting training programmes for the development / enhancement of functional and personal competencies / skills, identifying areas needing reforms in overall personnel policies of CSIR. During the

year the Centre has conducted training programmes on project management for senior scientists and project leaders; accrual based accounting system for finance personnel and new annual performance appraisal system for the scientists of each laboratory.

Intellectual Property Management : CSIR is spearheading its IP movement in the country and is eyeing for top slot in the elite group of patent filer worldwide, specifically in the view of new WTO regime. CSIR is making continuous efforts to maintain its dominant position in IP arena, which is reflected from the fact that it has filed 570 patents abroad and 407 patents in India this year. Besides, CSIR has filed 22 copyrights, 4 trademark applications and published 3018 research papers in SCI journals with Average Impact Factor per paper (AVIF) as 2.01.

ATOMIC ENERGY

The Department of Atomic Energy (DAE), established on 3 August 1954 is engaged in the development of nuclear power technology, applications of radiation technologies in the fields of agriculture, medicine, industry, and basic research.

- Increasing the share of nuclear power through deployment of indigenous and other proven technologies and also developing fast breeder reactors and thorium reactors with associated fuel cycle facilities;
- Building and operation of research reactors for production of radioisotopes and carrying out radiation technology applications in the field of medicine, agriculture and industry;
- Developing advanced technologies such as accelerators, lasers etc. and encouraging transfer of technology to industry;
- Support to basic research in nuclear energy and related frontier areas of science, interaction with universities and academic institutions, support to R&D projects having a bearing on DAE's programmes and international co-operation in related areas of research; and
- Contribution to national security.

An integrated group of organizations, the Department comprises five research centres, three Industrial Organisations, five Public Sector Undertakings and three Service Organisations. It has two Boards for promoting and funding extramural research in nuclear and allied fields, and mathematics.

It also supports seven institutes of international repute, engaged in research in basic sciences, astronomy, astrophysics, cancer research and education, etc., and a society that provides educational facilities to the chjildren of DAE employees.

Following is the profile of DAE's achievements and activities under its major programmes.

NUCLEAR POWER PROGRAMME

DAE has been pursuing the following 3-stage Nuclear Power Programme :

- The first stage comprises setting up of Pressurised Heavy Water reactors (PHWRs) and associated fuel cycle facilities. PHWRs use natural uranium as fuel and heavy water as moderator and coolant.
- The second stage envisages setting up of Fast Breeder Reactors (FBRs) backed by reprocessing plants and plutonium-based fuel fabrication plants. Plutonium is produced by irradiation of uranium-238.

- The third stage is based on the thorium-uranium-233 cycle. Uranium-233 is obtained by irradiation of thorium.

The first stage of Nuclear Power Programme is already in commercial domain. The Nuclear Power Corporation of India Ltd. (NPCIL), a public sector undertaking of DAE, is responsible for the design, construction and operation of nucelar power reactors. The company operates 17 reactors. (2 Boiling Water Reactors and 15 Pressurised Heavy Water Reactors) with a total capacity of 4120 MWe. NPCIL is also constructing 3 PHWRs and 2 light water reactors that will increase the installed nuclear capacity to 6780 MWe by the year 2008.

The Fast Breeder Programme is in the technology demonstration stage. To gain expereince in the second stage, the Indira Gandhi Centre for Atomic Research (IGCAR) has been engaged in the design and development of liquid sodium cooled fast breeder reactors. IGCAR has successfully developed the Fast Breeder Reactor (FBR) technology.The operational experience of FBTR of more than two decades and further technology developments have facilitated the design of a 500 MWe Prototype Fast Breeder Reactor (currently under construction of Kalpakkam). A new public sector undertaking Bharatiya Nabhikiya Vidyut Nigam (BHAVINI) of DAE is implementing this project which is expected to add 500 MWe to the Southern grid by the year 2010-11.

The third stage of the Nuclear Power Programme is in technology development stage. The ongoing development of 300 MWe Advanced Heavy Water Reactor (AHWR) at BARC aims at developing expertise for thorium utilization and demonstrating advanced safety concepts. Thorium-based systems such as AHWR can be set up on commercial scale only after a large capacity based on fast breeder reactors, is built up.

NUCLEAR POWER PROGRAMME : STAGE-I

PRESSURISED HEAVY WATER REACTORS

For the Indian Nuclear Power Progrmme, that took off in the sixties, PHWR was the reactor of choice for the first stage of the programme. However, to gain operational experience, initially an atomic power station comprising two boiling water reactors (BWR) was set up at Tarapur, Maharashtra. This was a turnkey project of the General Electric of USA. Commissioned in 1969, the station is still in operation.

The first two PHWRs, at Rawatbhata, Rajsthan, started commercial production in 1973 and 1981. The first unit (RAPS-1) was built with the help of the Atomic Energy of Canada Ltd. (AECL). However, the second unit was complted with the indigenous research and development endeavour and the support of the Indian industry. This success followed commissioning of the two 220 MWe reactors at Kalpakkam near Chennai, Tamil Nadu, in the years 1984 and 1986. Later, the design of the 220 MWe PHWR was standardized and two reactors of this design were commissioned at Narora, Uttar Pradesh, in 1991 and 1992.

The design standardisation has markedly reduced gestation period of new reactors. This technology of PHWR reached commercial maturity with the commissioning of two 220 MWe PHWRs at Kakrapar (Gujarat) in 1993 and 1995. In the year 2000, four state-of-the-art 220 MWe PHWRs, two each at Kaiga (Karnataka) and Rawatbhata (Rajasthan) came online. One more 220 MWe PHWR was commissioned at Kaiga in May 2007.

The reactor design of 220 MWe PHWR was successfully scaled up to 540 MWe. Two reactors of this scaled-up design have been successfully commissioned at Tarapur, in the years 2005 and 2006. The gestation period of the reactors has also been reduced drastically.

The growing experience of NPCIL in nuclear technology has resulted in improving performence of its nuclear power plants. It has embarked on the design of 700 MWe PHWRs with the same fissile inventory as the 540 MWe reactors.

The nuclear power generation has risen from 3000 million units in the year 1981-82 to 17794 million units for the calendar year 2006.

Ongoing Projects

A total capacity of 3160 megawatt is under construction. It comprises three 220 MWe Pressurised Heavy Water Reactors, two at Rawatbhata (RAPP-5&6) and one at Kaiga (Kaiga-2&$), two Pressurised Water Reactors of 1000 MWe each at Kudankulam and one 500 MWe prototype fast breeder reactor (PFBR) at Kalpakkam.

New Projects

The Government of India has also given, in principle, site approvals for setting up 8 additional nuclear power reactors aggregating 6800 MWe. These will consist of 700 MWe. PHWrs and 1000 MWe Light Water Reactors to be located at Kudankulam (Tamil Nadu), Kakrapar (Gujarat), Rawatbhata (Rajasthan) and Jaitapur (Maharashtra).

DAE has an ambitious nuclear power programme that aims at achieving an installed nuclear power capacity of 20,000 MWe by the year 2020, through internal resources and external collaborations.

THE NUCLEAR FUEL CYCLE

The Nuclear Power Programme has a number of ancillary operations which form the Nuclear Fuel Cycle. The Front-End of this Cycle includes mineral exploration, mining and processing of ore, and fuel fabrication. Reprocessing of spent uranium fuel and management of nuclear waste form part of the Back-End of the Cycle.

India has acquired comprehensive capability in PHWR design, construction and operation of associated plants / facilities covering the entire nuclear fuel cycle of the nuclear power programme based on pressurized heavy water reactors. This includes production of heavy water that is used as moderator and coolant in PHWR.

The DAE organizations contributing to the Front-End of the Nuclear Fuel Cycle Programme are the Atomic Minerals Directorate for Research and Exploration (AMD), Hyderabad; Uranium Corporation of India Ltd. (UCIL), Jaduguda (Jharkhand); Nuclear Fuel Complex (NFC), Hyderabad; and Heavy Water Board (HWB), Mumbai. BARC and IGCAR administer the Back End of the Cycle.

Front End Fuel Cycle

The operations under the Front-End Fuel Cycle range from mining, milling and processing of ore, and fabrication of fuel. In addition, heavy water production is also an ancillary programme to the DAE’s PHWR programme.

Survey and Exploration

The Atomic Minerals Directorate for Exploration and Research (AMD) is engaged in survey, exploration and evaluation of resources of uranium, thorium, niobium,

tantalum, beryllium, zirconium, lithium, yttrium and rare earth elements required for the indigenous atomic energy programme of the country. The geological studies related to the selection of nuclear power plant sites and repositories for the disposal of nuclear wastes are carried out by AMD in collaboration with the Nuclear Power Corporation of India Ltd. (NPCIL)

Survey and exploration for atomic minerals had commenced in 1949. Over the years, uranium deposits have been located at Jaduguda, Bhatin, Narwapahar, Turamdih (East and South), Banduhuran (Turamdih West), Central Keruadungri, Bagjata, Kanyaluka, Mohuldih and Nandup in Jharkhand; Domiasiat and Wahkyn in Meghalaya; Lambapur - Peddagattu, Koppunuru and Tummalapalle in Andhra Pradesh; Gogi in Karnataka and Rohil in Rajasthan. So far, AMD has established 61,000 tonnes of uranium metal.

Certain Proterozoic basins, which are the prime targets for unconformity-related high-grade uranium deposits are Andhra Pradesh; Delhi basin (fold belt) in Rajasthan; Bhima and Kaladgi-Badami basins in Karnataka, Chhattisgarh; Indravati and Abujhmar basins in Chhattisgarh; and Gwalior basin in Madhya Pradesh.

The Mesozoic and Tertiary basins, which are the targets for large tonnage sandstone type of uranium deposits under exploration, are the Mesozoic Mahadek basin in Meghalaya and Gondwana basin in Madhya Pradesh as well as the Upper Tertiary Siwalik basin in Himachal Pradesh. AMD has also stockpiled adequate resources of columbite-tantalite (niobium & tantalum mineral).

A number of beach sand deposits, containing ilmenite, rutile and leucoxene (titanium), zircon (zirconium), monazite (thorium and LREE), sillimanite and garnet have also been established in the East and West coasts in parts of Orissa, Andhra Pradesh, Tamil Nadu, Kerala, and Maharashtra, as well as in the inland Teri sand of Tamil Nadu and riverine places of Bihar and West Bengal. At Brahmagiri, Puri district, Orissa, a deposit containing 120 million tonnes of heavy mineral resources has been established. This is the largest single deposit of heavy mineral resources in the country. Besides, heavy mineral resources have also been identified at Narsapur, West Godavari district, Amlapuram, East Godavari district, Andhra Pradesh; Vayakallur-Tutto, Kanyakumari district;Tamil Nadu; and Thotatapalli - Alappuzha, Kollam and Alappuzha districts, Kerala.

So far, AMD has identified about 700 million tonnes of beach sand heavy mineral resources.

Mining and Ore Processing

The exploratory efforts of AMD, made earlier, had led to the opening of four underground uranium mines at Jaduguda, Bhatin, Narwapahar and Turamdih all in Singbhum (East), Jharkhand state. A new open cast mine was also commissioned at Banduhurang in Singbhum in 2007. These mines, being operated by the Uranium Corporation of India Ltd. (UCIL), a public sector undertaking of DAE, have been meeting the needs of the Indian Nuclear Power Programme.

To meet the projected demand of the nuclear power programme, UCIL has taken up the work to develop mines at Bagjata (in Jharkhand), Lambapur (Andhra Pradesh) and Domiasiat (Meghalaya). Efforts are being made for exploiting other secondary resources.

UCIL also operates a uranium mill for processing of the uranium ores to produce yellow cake which is further sent to NFC for fuel fabrication. In addition,

magnetite present in the uranium ore is recovered as a by-product in the uranium process plant.

The research and development in the field of ore processing and uranium metal production is done at Trombay. An uranium metal production facility for production of uranium ingot operates at Trombay.

Nuclear Fuel Fabrication

Nuclear fuel fabrication for power reactors and research reactors is done respectively at the Nuclear Fuel Complex, Hyderabad, and BARC. In the development of new fuels, BARC and IGCAR are engaged.

The Indian PHWR uses natural uranium-based fuel. A major milestone was achieved with the fabrication of the first fuel element at Trombay in 1959.

For industrial scale manufacture of nuclear fuel assemblies and zircaloy structural components for power reactors, the Nuclear Fuel Complex (NFC) was set up in Hyderabad in 1971. NFC, now an ISO 9001 organisation, manufactures zircaloy-4 clad natural and depleted uranium oxide and thoria bundles for pressurised heavy water reactors, zircaloy-2 clad enriched uranium oxide fuels for boiling water reactors and stainless steel clad thoria and depleted uranium oxide blanket sub-assemblies for liquid metal-cooled fast breeder reactor. NFC also manufactures zirconium alloy structural components for the above reactors. In addition, NFC produces seamless stainless tubes, hexcans and other structurals for fast reactor core assemblies and special alloy tubes. It also caters to the demand of high quality stainless steel tubes and pipes for critical and strategic applications in nuclear power plants and re-processing plants in atomic energy.

The plants of NFC have been performing very well meeting their annual production targets consecutively for the last six years and some of the plants have even crossed their plant capacities.

At BARC a wide variety of fuels have been developed and fabricated on industrial scale for fabrication of indigenous mixed oxide (MOX) fuel assemblies for boiling water reactors at TAPS.

BARC has set-up the Advanced Fuel Fabrication Facility (AFFF) at Tarapur. The MOX fuel produced here has given satisfactory performance.

Construction of a Zirconim Oxide Plant for enhancing the production capacity of zirconium oxide powder is underway.

Titanium half alloy hydraulic tubes are critical components in Light Combat Aircraft. The first batch of these tubes has been produced by NFC for the Aeronautical Development Authority. This development is considered to have a huge economic potential.

Heavy Water Production and Upgrading

The Heavy Water Board (HWB) of DAE is responsible for building and operating heavy water plants in the country. The Board has seven heavy water plants in the country. Besides meeting domestic needs of heavy water, the board has also exported heavy water. In November 2006, the Board executed the seventh export order of 13 MT of heavy water to South Korea besides entering into a contract with US for the supply of 4400 kg of nuclear grade heavy water.

Recognizing the efforts put in by the Board in the field of energy conservation and energy management, the Bureau of Energy Efficiency of the Ministry of Power,

assigned to the Board a lead role to carry out energy management and conservation for fertilizer, petroleum and chlor alkali sector industries to achieve the national goal of energy conservation.

Through continuing research, BARC had developed heavy water upgrading technology for use on commercial scale. Based on this technology, at present 23 upgrading final enrichment towers are in operation at various sites and some are under construction.

Back-End of Nuclear Fuel Cycle

The Back-End of the Nuclear Fuel Cycle comprises fuel reproceesing and nuclear waste management.

Fuel Reprocessing

The Indian nuclear power generation programme is based on closed-cycle approach that involves reprocessing of spent fuel and recycle of Plutonium and Uranium-233 for power generation.

From the inception of its nuclear power programme, DAE had commenced development of fuel reprocessing technology. It has a Pilot Plant for fuel reprocessing at Trombay and industrial scale plants at Tarapur and Kalpakkam. The plant at Trombay processes spent fuel from research reactors while the other two plants process spent fuel from power reactors.

Nuclear Waste Management

The radioactive wastes generated at various stages of nuclear fuel cycle are catagorised as low, intermediate and high level wastes. The plants for management of all types of radioactive wastes have been in operation at many nuclear facilities.

The high level wastes, generated in very small quantities, are fixed in a glass matrix. Vitrification, a complex technology possessed by a few nations only, has been successfully developed at Trombay. Based on this technology, two Waste Immobilisation Plants (WIPs) have been operating at Tarapur and Trombay. A facility for the immobilisation of waste in a cement matrix has been commissioned at Kalpakkam. BARC has constructed an Advanced Vitrification System at Tarapur for high level waste immobilisation based on Joule Melter Technology. India has become one of the six countries who have developed the Joule Heated Ceramic Mixer (JHCM) and set up such facilities for vitrification of high level waste.

Vitrified waste is stored in a specially designed Solid Storage Surveillance Facility (SSSF) for about 30 years prior to its disposal in deep geological formation. The first such facility has been in operation at Tarapur since 1999.

R&D Support to Nuclear Power

The programmes relating to nuclear power and the nuclear fuel cycle have been built on the multidisciplinary R&D infrastructure of the Department. The research and development relating to PHWR programme encompasses practically all the aspects of design, manufacture, construction, commissioning, operation and maintenance of power plants. Thrust on indigenisation of equipment and components has led to the development of technologies for operation and maintenance of power reactors. The technologies that emerged from the research and development include automation, monitoring, inspection, and repair systems,

equipment and gadgets. Special Purpose Machines have been designed, developed and successfully used for carrying out in-situ precision machining and cutting operations for the upgradation / maintenance of reactors. A number of state-of-the-art instrumentation and control systems for reactors and heavy water plants have been developed at BARC and IGCAR.

The R&D efforts are focused on reducing the unit energy cost through improving plant efficiency as well as plant availability factors, decreasing the project gestation period and improving plant safety. R&D has contributed immensely to plant life management. The strong R&D base has led to a number of successes notably repair of over pressure relief device of RAPS-1, en-masse removal and replacement of coolant channels of RAPS-2; Management of Calandria inlet manifold, End-shield repair; Steam generator hair-pin removal, Development of BARCIS system for in-service inspection of coolant channels, and System to relocate garter springs in coolant channels. A number of new technologies, such as servo-manipulators, image processing based alignment system, and others have been developed. From KAPS-2 onwards, improved coolant channel material and modified channel design have been adopted for longer life of coolant channels.

At BARC, Liquid Zone Control System (LZCS) in the 540 MWe PhWR consisting of six Liquid Zone Control Assemblies containing fourteen Zone Control Compartments (ZCCs), associated equipment for circulation of liquid absorber and inert cover gas in the ZCC's and measuring and control devices were designed and installed. Micro computer based Fault tolerant real time Process Control System has been designed and delivered for 540 MWe TAPP-3&4.

Robotics is one of the major thrust areas of the R&D programmes at BARC and IGCAR. A five-degree-of-freedom Robot, for deployment in radioactive chemical laboratories, a six-degree-of-freedom Robot and a mobile Robot have been developed at Trombay. At IGCAR, for automation of non destructive evaluation, various devices have been developed. These include a Mobile Scanner (MOBSCAN), a Remotely Operated Power Manipulator (ROPMAN), and a Robot for capping and decapping bottles.

Various pieces of equipment developed by BARC helped in improving the safe operating life of coolant channels from seven to more than nine effective full power years.

The 2 MW in-pile loop in Dhruva Reactor installed for nuclear fuel studies is a major achievement. A Remotely Operated Hydraulic Trolley & Manipulator (ROHYTAM) developed for handling of nuclear power plant emergencies, successfully completed its test run. To meet the quality needs of the nuclear programme, several non destructive testing techniques and equipment have been developed by BARC and IGCAR.

DAE has been promoting technology relating to quality assurance. Over a period, this approach has paid dividends to the nation by upgrading the quality levels of the Indian industry.

Electronics & Instrumentation

To meet the hi-tech instrumentation needs of the nuclear technology, a strong R&D base was created in electronics and instrumentation, first at TIFR and later at BARC. The knowhow and the products developed at Trombay in the area of electronics have led to the setting up of the Electronics Corporation of India Ltd. (ECIL) at

Hyderabad in 1967. The company pioneered the electronics and computer revolution in India. During seventies and eighties, ECIL led the television revolution in the country by bringing out indigenous black & white and colour television sets and also rural rebroadcast systems.

ECIL, is now a multi-product and multi-disciplinary organisation providing key technology inputs, system integration and system solutions in the areas of information technology, strategic electronics, communications, control and automation, instrumentation and components.

ECIL, through its software expertise, has contributed to automation in the banking sector, control room and dial-100 automation for the police, message switching systems for defence and telecom sectors, management information systems for the ports, municipal corporations and market yards and others. The company has provided countrywide SPC telex networks, message switching network and mainternance systems for telephone exchanges, and contributed to the technology solutions, in the areas of command, control, communications, computers & information / intelligence systems. Nuclear and thermal power plants, steel plants and process industries are equipped with ECIL's control systems developed through in-house R&D.

The DAE research centres are also engaged in the development of sophisticated electronic systems, instruments and components for the nuclear power programme and various other applications.

NUCLEAR POWER PROGRAMME - STAGE : II

FAST REACTOR PROGRAMME

The second stage of nuclear power generation envisages setting up of fast breeder reactors (FBRs) backed by reprocessing plants and plutonium-based fuel fabrication plants. These fast breeder systems produce more fuel than what they consume. FBRs can increase fuel utilisation by about sixty times of what is possible with PHWRs.

IGCAR started the breeder programme with the setting up of a Fast Breeder Test Reactor (FBTR) at Kalpakkam, Tamil Nadu in October 1985. This reactor, operating with indigenously developed mixed uranium-plutonium carbide fuel has achieved its technology objectives.

The reactor operated at a power level of 17.4 MWt and the turbo-generator was connected to the grid, feeding 1.8 million units of electricity. The fuel has reached a burn up of 1,55,000 megawatt day per tonne (MWd / t), that is more than four times the originally designed value.

Based on the experience gained with the FBTR, the Bharatiya Nabhikiya Vidyut Nigam Ltd. (BHAVINI-formed in October 2003) is constructing a 500 megawatt (e) Prototype Fast Breeder Reactor (PFBR) at Kalpakkam, Tamil Nadu. It is a pool type reactor using a mixed oxide of uranium and plutonium as fuel, the design and technology of which were developed at IGCAR. The PFBR is expected to go critical in September 2010. The FBR programme is poised to enhance the electricty potential in India through available uranium-metal resources by a factor of about 100.

The thrust of the R&D programme at IGCAR is oriented towards the design validation of PFBR in the first instance, and subsequently, the design optimisation for future FBRs, to reduce the cost.

Fast Reactor Fuel Fabrication

The Mark-I mixed carbide fuel core, with high plutonium content, has been developed for the first time in the world.

Fabrication of Mark-II core is progressing at Trombay. A number of PFBR MOX fuel elements for making experimental PFbR subassembly, for irradiation in FBTR, have been fabricated by BARC.

Fast Reactor Fuel Reprocessing

For reprocessing of FBTR fuel, the lead Mini Cell, henceforth known as Compact Reprocessing facility for Advanced fuels in Lead cells (CORAL) has been commissioned at Kalpakkam. It is aimed at establishing the fast reactor reprocessing process flow sheet. For reprocessing of fuel from fast breeders, IGCAR is setting up the Fast Reactor Fuel Reprocessing Plant (FRFRP). A comprehensive procedure has also been evolved at the Centre for the recovery of uranium and plutonium and separation of the radioactive fission products from the spent fuel solutions.

Fast Reactor Technology Development

Under the technology developement programme, IGCAR is pursuing engineering-related research & development such as thermal hydraulic and structural mechanics studies, development of components such as control and safety rod drive mechanism and various test facilities such as Sodium Water Reaction Test Facility and Steam Generator Test Facility.

NUCLEAR POWER PROGRAMME-STAGE-III

THORIUM BASED REACTORS

Thorium utilsation is the long term core objective of the Indian Nuclear Power Programme for providing energy security for the country on a sustainable basis. The third stage of the Indian Nuclear Power Programme is based on the thorium-uranium-233 cycle.

A beginning has already been made by introducing thorium, in a limited way, in research reactors and in pressurised heavy water reactors.

The research reactor KAMINI operating up to a nominal power of 30kW for neutron radiography of various materials, at Kalpakkam, uses uranium-233 fuel derived from thorium. This fuel is bred, reprocessed and fabricated indigenously.

BARC is engaged in developing 300MWe advanced Heavy Water Reactor (AHWR). This endeavour aims at developing expertise for thorium utilization and demonstrating advanced safety concepts. Its reactor physics design is tuned to generate about 75% power from thorium. Being a first of its kind in the world, the AHWR design is being subjected to a rigouous peer review so as to optimize and validate it.

Mixed Thoria-Urania and Thoria-Plutonia are the candidate fuels for the AHWR. The fuel pellets have been successfully fabricated by the conventional power metallury route. The design of this reactor incorporates several advanced safety features. The overall physics design including core configuration has been completed. A critical facility for validation of physics calculation pertaining to AHWR core design is being set up at BARC.

Design and development of a high temperature reactor system including Compact High Temperature Reactor, Nuclear Power Pack and High Temperature

Reactor for Hydrogen Generation, mainly for process heat and non-grid based electricity generation applications, are also continuing at Trombay. A Compact High Temperature Reactor (CHTR), with 100kW thermal power rating, being developed here, will be used for electricity generation in remote places, production of altemative transportation fuel such as hydrogen, and refinenment of low-grade coal etc.

For breeding fissile uranium-233 from thorium, development of Accelerator Driven Sub-Critical Systems (ADS) for nuclear reactor is the latest addition to the Indian nuclear programme. ADS can provide a strong technology base for large-scale thorium utilization. This endeavour offers promise of incineration of long-lived actinides and fission products, thereby reducing the technical complexities of storage of long-life high-level radioactive wastes. As a first step towards realization of ADS, DAE has launched development of proton injector. To carry out experimental studies on sub-critical assemblies, a 14 MeV neutron generator has also been upgraded with a higher current ion source.

For the separation of uranium-233 from irradiated thorium fuel on a plant scale, a uranium-thorium Separation Facility is in operation at Trombay.

SAFETY & ENVIRONMENT

The safety operations through the entire nuclear fuel cycle, from prospecting and mining of ores to management of waste, encompass all the aspects of safety, viz. radiological safety, industrial safety, occupational health, fire safety and environmental protection.

In all the nuclear installations, care is taken to protect operating personnel, public and the environment. An independent body, the Atomic Energy Regulatory Board (AFRB) monitors safety. The safety standards formulated by AREB are on par with those recommended by the international organisations such as the International Atomic Energy Agency (IAEA) and the International Commission on Radiological Protection (ICRP).

NPCIL isa member of the World Association of Nuclear Operators (WANO). The Association has conducted peer reviews of the atomic power stations at Kakrapar and Narora. Also, from time to time, Indian experts have participated in peer reviews in a number of countries including USA, Japan and South Korea. As a result of consistent efforts, the nuclear power plants have achieved about 260 reactor years of safe operation.

Safety surveillance inspections are regularly carried out and comprehensive Emergency Preparedness and Response Plans to handle postulated emergency scenarios are in action at the DAE facilities.

BARC and the laboratories accredited by it conduct countrywide personnel monitoring in about 3000 industrial, medical, research and DAE organisations which benefit over 30,000 radiation workers annually.

Environmental radiation monitoring and environmental surveillance are the regular features of the environmental protection programme of DAE.

At different sites, the Environment Survey Labs (ESLs) of BARC continuously monitor environment, and collect site-related meteorological data. Sophisticated weather monitoring SODAR systems are operational at Kaiga, Kalpakkam, Tarapur and Trombay.

IREMON, a nationwide network of environmental radiation monitoring stations detects radiation releases. Interfaced with global postitioning system, a

Compact Aerial Radiation Monitoring System. (CARMS) for estimation of large area contamination using unmanned aerial vehicle, is also in operation at Trombay.

DAE is committed to not only preserving the environment but also to its further enrichment. All the operating nuclear power plants and heavy water plants now have the ISO environment certificate.

To educate the public living around nuclear power plants, public awareness programmes by DAE organisations are organised on a regular basis.

Environment Friendly Technologies

DAE is a pioneer in conducting comprehensive thermal ecology studies in India. The flue gas conditioning technology developed by Heavy Water Board is now helping to reduce fly ash emission from thermal boilers.

The Nisarga-Runa technology developed at BARC converts biodegradable solid waste into useful manure and methane. A number of such plants have been set up at various places.

The Sewage Sludge Hygienisation plant (SHRI) at Vadodara continues to provide dried hygienised sludge for use by farmers.

The hygienised sludge being pathogen free can be beneficially used as manure in the agricultural fields as it is rich in nutrients required for the soil. Further, it can also be used as amedium for growing soil-useful bacteia like-rhizobium and azetobactor to produce enriched manure that can be used to enhance the crop yields. Large scale field trials of utilizing radiation processed municipal sewage sludge in the agricultural fields have been conducted under the supervision of Krishi Vigyan Kendra (KVK, Vadodara). The trials conducted showed increase in the yields of many agricultural crops.

RADIATION TECHNOLOGIES & APPLICATIONS

DAE's programme relating to radiation technologies and application covers building and operation of research reactors for production of radioisotopes, and other sources of radiation such as accelerators and lasers, and developing and deploying radiation technology applications in the field of medicine, agriculture and industry.

Research Reactors

The research reactor programme of DAE provided research and 'development support to the nuclear power programme, produces radioisotopes for use in health care, agriculture, industry and research, and provides manpower training.

The research reactors set up by DAE so far, have been Apsara (1mW, Fuel: Enriched Uranium-Aluminium alloy), CIRUS (40MW, Fuel: Natural uranium), Zerlina (zero energy, Natural Uranium), Purnima I-III (Fuel: Plutonium / Uranium-233), Dhruva (100 MW, Fuel: Natural Uranium) at Trombay (Maharashtra), and Kamini (30kW, Fuel : Uranium-233-A1 alloy) and Fast Breeder Test Reactor (40MW, Fuel : Uranium-Plutonium carbide) at Kalpakkam (Tamil Nadu). Of the research reactors, Zerlina was decommissioned in 1984, and Purnima series made way for Kamini.

Dhruva, CIRUS and Apsara are used for producing radioisotopes besides their use in research and development relating to nuclear technologies and materials, applied and basic research, and training. KAMINI is used mainly for radiography

of various materials, and FBTR is the test bed for the development of fuel, blanket and structural materials for fast breeder reactor programme.

The new ventures include the development of a Critical Facility at Trombay for reactor physics experiments relating to AHWR and 540 MWe PHWR, and a pool type 200MWt Multi Purpose Research Reactor.

Radioisotope Production & Processing

India is a leading producer of radioisotopes in the world. Radioisotopes are produced in the research reactors at Trombay, atomic power reactors at various places in the country, and cyclotron at Kolkata.

The radioisotopes produced at Trombay and at the nuclear power stations, are processed by BRIT. These products include radiopharma-ceuticals, labelled compounds, radiochemicals, radiobiomolecules, radiosources and a number of devices using radioisotopes.

The radioisotope-based products and services are now commercially available through BRIT.

Applications of Radioisotopes

The radioisotopes produced at Trombay find wide applications in the fields of agriculture and food, medicine and health care, industry, and research. Based on these applications, the following programmes have been established.

Nuclear Agriculture

The Nuclear Agriculture Programme of DAE focuses on the use of radiation technology for the development of high yielding crop seeds, radiation processing of food items, fertilizer and pesticide-related studies, and other areas. These technologies are benefiting Indian farmers and traders.

Crop Improvement

BARC, in collaboration with agricultural universities, has been engaged in research and development in the field of crop improvement. The Centre has successfully developed several high yielding crop varieties. Of these 29 varieties have been notified and released for commercial cultivation by the Ministry of Agriculture, Government of India. These include 12 groundnut, 11 pulses, 2 mustard varieties, 2 soybean varieties and one each variety of jute and rice.

BARC has successfully developed green manure crop - Sesbania rostrata that is proving highly cost-effective for small farmers. A tissue culture-based protocol for rapid multiplication of some commerial cultivars of banana has been developed here. This technology has been transferred to the Maharashtra State Seeds Corporation.

Using micro-propagation technology, BARC has standardised large-scale multiplication of pineapple. Micro propagation protocol has also been standardized in three varieties of sugarcane. The Centre has made good progress in developing hardened plants for Acacia Victoriae - a plant suitable for desert area. Here, several insect pheromones have also been synthesized and techniques for determination of nutrients in soils have been developed.

For wider deployment of the technologies developed by its organisations, DAE has set-up an interface with Ministry of Agriculture.

Food processing

The Department has set-up plants for demonstration of high and low dose applications of radiation. These are Radiation Processing Plant set up by BRIT at Navi Mumbai for high dose radiation processing of spices, and KRUSHAK (Krushi Utpadan Sanrakshan Kendra), set up by BARC at Lasalgaon near Nashik, for low dose applications of radiation for food preservation. This plant processes onion, pulses, rawa and turmeric.

The Government of India has approved radiation processing of certain food items both for export and domestic consumption.

The Radiation Processing Plant at Vashi processed more than 1500 MT of spices and other allied products.

The major thrust given to the area of setting up of new radiation processing plants for medical, food-related and allied products, has shown very encouraging results. Considerable progress has been achieved in the setting up of radiation processing plants in private sector. The first radiation processing plant in private sector by M/s. Organic Green Foods Ltd. is operating in Kolkata. Three Gamma Processing Plants have been completedin Sonepat (Harayana), Ambernath (Maharashtra) and Vadodara (Gujarat). Apart from supplying the Cobalt-60 sources for the new plants, BRIT provides requisite technical guidance and facilitation services (from conception to commissioning stage) to enable the entrepreneurs to commission the plants in a time-bound manner. Recently, four more private agencies have signed MOU with BRIT for setting up gamma irradiation plants in different parts of the country.

Nearly 300 tonnes of onion from a private entrepreneur were irradiated at BARC's Krushak plant at Lasalgaon, district Nashik, Maharashtra.

In April, 2007, the KRUSHAK Radiation Processing Facility became the first cobalt-60 gamma irradiation facility in the world to be certified by the United States Department of Agriculuture-Animal & Plant Heath Inspection Service (USDA-APHIS) for phytonsanitary treatment of mangoes, enabling export of mangoes from India to USA. India exported the first consignment of 720 kg Alfonso and Kesar mangoes to the US.

All exporters interested in processing mango for exports to the US need to approach the Agricultural Product Export Development Authority (APEDA) and bring mangoes to the facility only through APEDA-approved orchards and packing houses.

Recently, an MoU has been signed between BARC and the National Centre for Electron Beam Food Research, Texas, USA for co-operation in the advancement of electron and X-ray irradiation technologies to promote food preservation, food safety and phytosanitary applications.

A 10 MeV/10 kW LINAC for food irradiation has been commissioned at RRCAT.

BRIT has also developed an install-and-operate type Irradiator for radiation processing for approval of additional items and other related issues.

Research at BARC is focused on radiation processing for preservation of cereals and pulses, fruits and vegetables, meat and meat products and seafood. In meat preservation, a process for preparation of shelf-stable intermediate moisture meat products using gamma radiation has been standardized. The effect of the

combinations of radiation, packaging, and low temperatures, extension of shelf-life of a number of fruits and vegtables and coffee beans, are under extensive study.

Nuclear Medicine and Heath care

Radioisotopes and their formulations find wide applications in diagnosis, therapy and health care. BARC and BRIT are the main centres of this activity.

At BARC, Cesium-137 based brachy therapy sources are routinely produced. For treatment of cancer of eye, radiation sources of the size of rice grain, containing 2-3 milli curie of Iodine-125, have been produced here. This miniature source was tried for the first time for treatment of eye cancer at Sankara Netralaya, Chennai. Another salient development here is the digital medical imaging system based on a Charge Coupled Device (CCD).

BARC has successfully developed radiation-processed hydrogel for treating burns, wounds and leprosy; Holmium-166-Hydroxy Apatite (HoHa) and Samarium-153-Hydroxy Apatite (SmHa) radiopharmaceuticals for treatment of arthritis, and radiolabelling of phosphonates with Luthinium-177 for intemalised radiotherapy.

Tuberculosis is a major health problem in India. For detection of the disease infection, BARC developed a sero-diagnostic test-kit with X-ray imaging using a three dimensional cone-beam tonography which is another important development.

BARC's Radiation Medicine Centre (RMC) in Mumbai is involved in research and development in nuclear medicine and allied sciences. The centre offers diagnostic and therapeutic services using radioisotopes, and promotes human resource development in nuclear medicine. It is a regional referral centre of the World Health Organisation, and the International Atomic Energy Agency (IAEA).

Radioimmunoassays (RIA) and related procedures are used for the measurements of hormones, enzymes, certain serum proteins, and others. RMC is amajor provider of RIA services in the country, to thyroid patients. This centre annually dispenses of 90,000mCi of Technetium based radiopharmaceuticals, and annually carries out 8000 radiodiagnostic investigations and 9000 radioimmunoassays.

For the radiodiagnosis needs in the eastern part of the country, the Regional Radiation Medicine Centre (RRMC) of VECC is operating at Kolkata. The Centre carries out nuclear imaging and hormone estimations.

BRIT processes and formulates radiosotopes produced in the research reactors Dhruva and Apsara at Trombay and also in the power reactors of NPCIL. These products are supplied to nearly 2000 institutions in the country for applications in agriculture, health care, and supporting research in life sciences and bio sciences. BRIT also manufactures radiation technology based equipment, and provides radiation processing services to medical sector.

Annually, BRIT supplies over 43,000 consignments of radioisotopes and allied products, and over 45,000 cold kits for formulation of 99mTc (Technetium) radiopharma ceuticals, and 99Mo and 131 I to nuclear medicine centres and cancer hospitals all over the country. With the help of these radiopharmaceutical products and cold kits, over 3 lakh diagnostic imaging studies are performed annually, and a number of patients are treated for thyroid disorders and thyroid cancer. BRIT is working on the development of Samarium 32P Phosphate colloid injection for the treatment of the disease of joints. With this development, a long-felt need of the medical community for an inexpensive alternative to bone palliation agents will be

fulfilled. A new automated remote liquid dispensing system for dispensing radioactive consignments into vials has been developed and deployed in the 99 Mo production plant. Supply of Cs-137 Manual After-Loading Applicators was resumed for the benefit of cancer patients in the country, particularly, those suffering from the cancer of the cervix. Technology for the production of Hydrogel Burn & Injury dressings was transferred to a private sector firm in Hyderabad which is going to launch the product in a big way.

Radioimmunoassay (RIA) is aversatile in vitro technique for the measurement of hormones, vitamins, drugs and other substances present in biological fluids. Another technique known as immuno-radiometric assay (IRMA) is also used for such estimations.

Nearly 10,000 RIA / IRMA kits of different hormones are supplied to about 650 RIA centres in the country. The newly developed T3 / T4 magnetic particle based RIA kits have been introduced in the market for thyroid hormone investigations. About 5 lakh patient sample analysis are carried out every year using these radioimmunoassay kits.

The RIA Centres of BRIT at Bangalore and Dibrugarh conduct 6000 and 5000 radioimmunoassays annually. BRIT's regional centres at Bangalore and Delhi process ready-to-use Technetium-99m radiopharmaceuticals for use in hospitals in their regions.

Labelled compounds are versatile tools for research and tracers. Important labelled compounds supplied by BRIT include phosphorus-32 and Phosphorus-33 labelled nucleotides, Sulphur-35 labelled amino acids, Carbon-14 labelled compounds, Tritium labelled compounds, and others, and cold kits for biological research / non / radioactive labelling.

BRIT's biomolecule producing laboratory Jonaki at Hyderabad supplies over a dozen labelled nucleotides and molecular biology kits to user institutions across the country on a regular basis.

BRIT produces and supplies sealed radiation sources of Cobalt-60 and Iridium-192 to a number of radiotherapy centres in the country, for cancer treatment.

To provide a low cost alternative teletherapy unit for the expensive imported teletherapy unit, a Cobalt-50 Teletherapy Machine has been developed at BARC. The first unit of Bhabhatron installed at Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Navi Mumbai is used regularly for treating cancer patients. An improved model of the Bhabhatron has been installed in a Red Cross Hospital in Nellore, Andhra Pradesh.

Radiation Sterilization of Medical Products

BRIT has been operating radiation sterilization plant ISOMED, now ISO-9002 accredited, at Trombay. The plant provides radiation sterilization services to several users. This plant processes more than 14000 cubic metres of medical products annually.

Over two million Dai (midwifery) kits and delivery packs were radiation sterilized at ISOMED, and distributed for use in rural areas for preventing infection of mothers and helping to minimize infant mortality rate, through rural health programmes funded by WHO. The International Institute of Population Studies, Mumbai, in its study has found that the infant mortality rate has fallen by 25-30% in Rajasthan, Madhya Pradesh, Maharashtra and Uttar Pradesh, as a result of distribution of the kits in these areas.

Similar to ISOMED, plants are also in operation at the Shriram Centre for Industrial Research, Delhi and Kidwai Memorial Institute of Oncology, Bangalore. A plant for R&D purposes has been in operation at the Defence Research and Development Organisation, Jodhpur, Rajasthan.

Radiation Processing Plants in the Private Sector

With a new gamma irradiation plant in the private sector having been commissioned in Bangalore under the technical guidance facilitation services provided by BRIT there are now five such plants operating. Seven MoUs have been entered into with private agencies for setting up such plants.

Industrial applications of Radioisotopes

The studies conducted by BARC have immensely contributed to the detection and re-charge conditions of ground water bodies. Some of these include evaluation of the groundwater recharge conditions in the Delang-Puri sector of coastal Orissa, determination of the origin of thermal waters in the geothermal areas in Madhya Pradesh, Uttar Pradesh and Himalayas, and establishement of the ancient course of the legendary 'Saraswati' river in Western Rajasthan.

Major activities relating to hydrology cover evaluation of recharge measures at coastal fresh groundwater system of Thiruvadanai, Tamil Nadu, sustainability of deep groundwaters at Kuttanad, Kerala, detection of fluoride contamination in groundwaters of Karnataka, solution of leakage / seepage problems of a few dams in Kerala and Rajasthan; origin of groundwater along paleo channels in Jaisalmer disrict, Western Rajasthan, and seepage and source of salinity in the Indira Gandhi Nahar Pariyojana Command Area, Hanumangarh, Rajasthan.

The studies conducted by BARC on sediment transport at almost all the major ports have resulted in increasing the intervals between desilting campaigns, which saved huge cost of desilting operations. Studies on bed load transport at Kolkata and Karwar ports have helped in port-expansion programmes. A nucleonic suspended sediment concentration gauge developed at Trombay, has proved to be a useful tool of the dredging operation in ports.

Using radioisotope tracer techniques, a major study on the dilution and dispersion of the sewage disposed of into sea at the Colaba outfall in Mumbai, was conducted by BARC.

BARC's expertise in gamma scanning is being used by the major petrochemical industries for troubleshooting in process equipment, detecting leaks in buried pipelines, industrial process controls etc. Other noteworthy studies carried out by BARC include detection of leakage points in 350 km long natural gas pipeline of the Gas Authrity of India, and gamma scanning of distillation and degasser columns for Mumbai and Baroda based companies.

Using radiotracing techniques, leaks in the heat exchangers of the Indian Oil Corporation's Panipat Refinery, Haryana and Tamil Nadu Petroproducts Ltd. Chennai, Tamil Nadu were detected. These techniques were also used in the effective management of the oil fields of the Oil and Natural Gas Commission.

BARC's radiotracing expertise is being used by the industrial units in many diverse ways. Gamma scanning is an indispensable non-destructive technique for solving online problems in industieal process columns. Using this technique, BARC has successfully conducted investigations on a depropaniser column of the Reliance

Industries Ltd., Hazira, Gujarat, and carried out shielding integrity tests for different DAE facilities.

Gamma scanning technology developed at Trombay is used for trouble shooting and process optimization in a number of process industries in the country. This has resulted in minimizing production losses, which could be of the order of several crores of rupees per day for such big units.

Automated Gamma scanning system is developed for on-line inspection, troubleshooting and process optimization of industrial process plants, Petrochemical / Oil refineries, Heavy Water plants etc. The technique utilizes scanning of process columns up to 70-metres height.

Radiochemicals are used as tracers for studying mechanisms of chemical reactions, leakage and flow rate measurements in pipelines and sediment studies. BRIT produces a number of radiochemicals to facilitate such studies.

The radiation technology equipment manufactured by BRIT for use in industry include radiography camera for ascertaining internal defects of welding, casting etc., Gamma chamber, a compact self shielded Cobalt-60 research irradiator for irradiating samples, and Blood Irradiator for radiation processing of blood and blood products by gamma rays to eliminate the risk of post transfusion graft versus host disease.

BRIT has helped ONGC in its soil exploration efforts by supplying 14C-ammonium thiocyanate (500 mCi) and Tritiated Water (75 Ci).

NDT centres in the country are the major beneficiaries of BRIT which is the sole supplier of Ir-192 radiography sources in the country. Sealed sources are fabricated, processed and supplied for various industrial applications. BRIT also exported 60 Co source pencils to Vietnam.

A large number of Radiography Cameras and Gamma Chambers manufactured by BRIT are already in the use of Indian Industry. Blood irradiator developed at BRIT is used in hospitals and blood banks. Such units have also been installed at the regional centres of BRIT in Bangalore and Delhi.

BRIT processes Cobalt-60 at RAPPCOF, Kota, Rajasthan, and manufactures radioisotope based equipment for industrial and other applications. For radiography examination of industrial products, it supplies Iridum-192 sealed sources and remotely operated radiography cameras (ROLI-1)

The Board also exports radioisotopes and related equipment to countries such as United Kingdom, Germany, Bangladesh, Egypt, Myanmar, Nepal, Sri Lanka, Syria and Tanzania.

Beam Technologies

Laser systems and Electron Beam Acceleators are the areas where India is one of the front runners. The DAE's research organisations viz. Raja Ramanna Centre for Advanced Technology (RRCAT) in Indore, Madhya Pradesh and Bhabha Atomic Research Centre (BARC) in Mumbai, are engaged in the development of applications in the areas of Laser systems, Electron Beam processes and devices, and Plasma devices.

Currently a number of equipment based on electron beam technologies are being developed. BARC is working with major cable manufactures to indigenously

develop electron beam cross linked cables. In collaboration with Sriram Institute of Chemical Research, New Delhi, BARC developed a special formulation of PVC based material which on radiation cross-linking, leads to a product that can withstand temperature upto 105 deg. Celsius. To induce uniform crosslinking, a rotating multispindle conveyor system was designed at Trombay. The process has been commercialised.

BARC has successfully developed a 500 keV, DC Accelerator, housed at BRIT Complex, Vashi, Navi Mumbai. The accelerator has been in regular operation for surface modification studies as well as applications. M / s Reliance India Ltd. is using it for crosslinking of plastic sheets and granules. BARC and IIT-Madras, Chennai are pursuing radiation damage studies of materials by using 500keV accelerator beams.

To meet the diverse demands of radiation processing of materials, BARC is designing and developing a 3 MeV, 30 kW DC accelerator and a 10 MeV, 10kW RF electron Linac. They are going to be housed at Electron Beam Centre (EBC), Kharghar, Navi Mumbai. A 10 MeV, 10 kW RF electron Linac has been installed and the components of a 3 MeV accelerator are in the advanced stage of fabrication. EBC is planned to serve as a unique and dedicated centre for carrying out research and development in the areas of industrial accelerators and material processing.

High Power Pulsed Electron Accelerators

High Power pulsed electonic accelerators are used for producing Flash X Rays (FXR) and High Power Microwaves (HPM). These accelerators have many applications in the industry, nuclear power sector and the strategic areas. BARC has been developing two types of accelerator in this category, namely single and repetitive shot types. Kali 200, Kali 1000 and Kali 5000 belong to the single shot and the Linear Induction Accelerator (LIA) to the repetitive type. Kali 200 has been handed over to DRDO, MTRDC Bangalore. Kali 5000 has been commissioned recently and is in use at a microwaves power level of about 2 gigawatt. The Kali-5000 is used for High Power Microwave (HPM) generation and Flash X-Ray experiments.

High Power Electron Beam Units for Thermal Processing

BARC has developed a number of High Power Electron Beam (EB) machines for evaporation, melting and welding of reactive and refractory metals and their compounds. One 150 kV, 6 kW welder has been supplied to Machine Tool Prototype Factory of Ministry of Defence, Ambernath. This is being used for welding of maraging steel components. At present it is developing one 80 kV, 24 kW welder for welding thick section materials. The centre has recently developed one 30 kV, 80 kW melting unit for melting of reactive and refractory metals. Coating units have been developed for production of hard and corrosion resistant coatings as well as optical coatings on various surfaces.

Laser Systems and Applications

BARC and RRCAT have developed a variety of lasers that include gas lasers, solid state lasers and semiconductor lasers which find wide applications. The laser based devices that have been developed include a projectile speed-measuring instrument commissioned at the Defence Metallurgical Research Laboratory, Hyderabad, and Surface Profilo-meter for measuring roughness. For measurement of the equation-of-state-of-materials, various shock diagnostics systems are being set up at Trombay.

Plasma Devices and Systems

BARC has developed a large number of atmospheric plasma torches and processing systems. The high power plasma torches (40 - 300 kW) operating in transferred and non-transferred arc mode have been used for cutting, melting, spraying and other high enthalpy applications. A few notable examples are the joint work with Department of Space culminating in establishment of a plasma jet assisted thermal protection materials testing system at Tiruvananthapuram, underwater plasma cutting systems and plasma assisted aerosol generator for BARC. On surface engineering, plasma spray systems have been extensively used to develop special purpose thermal barrier, chemical barrier and bioceramic coatings that have drastically improved system performance. Low pressure surface coatings of 1-2 micron have also been developed using microwave plasma.

Water Management

BARC has developed a number of desalination technologies. These are based on multi-stage flash (MSF) evaporation, reverse osmosis (RO) and low temperature evaporation (LTE). Using these technologies, desalination plants have been developed for providing potable water in rural areas and on ships, and water for industrial uses.

To utilize low pressure steam and waste heat from nuclear reactors, BARC is setting up a 6300 cubic metre / day combined MSF-RO Nuclear Desalination Demonstration Plant (NDDP) at Kalpakkam, Tamil Nadu. The plant will utilize seawater, steam and power from Madras Atomic Power Station (MAPS) for achieving cost effective desalination of seawater.

The 1800 cubic metre / day desalination unit, based on reverse osmosis (RO) process, has been commissioned. It is now producing potable water from seawater.

A small (30 cubic metre / day desalination unit, based on low temperature evaporation technology, and using waste heat of CIRUS, has been set up and commissioned at Trombay.

A 30 cubic metre / day brackish water RO plant operates at Satlana village, Jodhpur District, Rajasthan for providing drinking water to the villagers.

BARC has recently developed the Vapour Compression (VC) technology for seawater desalination and a 50,000 litres / day VC desalination plant has been installed and commissioned successfully.

BARC has also introduced an on-line Domestic Water Purifier that has been brought to the commercial market by several BARC licensees.

BASIC RESEARCH

The research centres of DAE are engaged in basic research in the areas relevant to their programmes. In addition, the autonomous research institutes, supported by grant-in-aid by DAE, are the centres of excellence in basic research that ranges from mathematics to computers, physics to astronomy, and biology to cancers.

Mathematics & Computation

In the field of mathematics and computation science, TIFR pursues academic programmes in algebra, algebraic geometry, Lie group, egodic theory, number theory, combinatories and topology at Mumbai and applications of mathematics at its Bangalore Centre, the Harish Chandra Research Institute, Allahabad, carries out

research in advanced fields of mathematics and theoretical physics including astrophysics, high-energy physics, condensed matter physics and mathematical physics, and the Institute of Mathematical Sciences at Chennai, Tamil Nadu is engaged in research in the fields of Theoretical Physics, Mathematics & Computer Science.

In its effort to develop teraflop parallel super-computers with more than 1000 processors, BARC has developed over 15 different models of Anupam series of supercomputers since 1991. So far, 37 supercomputers have been commissioned at leading R&D and educational institutes in the country.

The Anupam-Ameya supercomputer developed by BARC is a 512 CPU cluster and is the largest and fastest in the ANUPAM series. The machine consists of 256 Dual processor Xeon based IU servers interconnected to gigabit Ethernet network.

Physics

The School of Physics of TIFR is engaged in basic research in various fields of physics.

The national Facility for High-Field NMR at TIFR provides state-of-the-art services to researchers.

The Institute of Physics, Bhubaneshwar conducts research in condensed matter and high energy, nuclear, atomic and accelerator based physics and other related subjects. One of the main experimental facilities at the Institute is the Ion Beam Accelerator. The research facilities set up here are used by the researchers from within the Institute as well as from other research institutes and universities in India.

At the Harish-Chandra Research Institute, the research in physics covers the work on understanding the ground state of open string theories, which possess tachyons. Supergravity solutions with a positive cosmological constant are the other major areas of studies.

Seismic Studies

BARC monitors seismic activities at Garibidanur in Karnataka, Delhi and Trombay seismic stations. In addition to routine seismic analysis, research is also carried out in surface wave studies, development of analysis software and in other front line areas.

Superconductivity

The field of superconductivity holds big promise for the future. BARC has completed a test facility to characterize samples of superconducting cables at liquid helium temprerature. At VECC, test facility has already been created and successfully used to characterize superconducting cable and their joints. IGCAR is also working towards the development of SQUID based systems for material technology including non-destructive testing.

Astronomy

In the field of radiostronomy, a Radiotelescope Array, set up in the Nilgiri Hills near Ootacamund, Tamil Nadu, has been in use for decades. It is used in the studies of distant extragalactic radio-sources and interplanetary objects.

At Narayangaon, near Pune, Maharashtra, the Giant Metre Wave Radio-Telescope (GMRT) with 30 gigantic parabolic dishes, has been in operation. Set up by TIFR, the telescope is a frontline research facility in radioastronomy and is the

world's most powerful radiotelescope in its range. GMRT is now a full fledged international observational facility for radioastronomy. A number of national and international users have carried out research in astronomy, on this telescope.

Another international class astronomy-research facility GRACE has been set up by BARC at Mount Abu, Rajasthan. It includes TACTIC. (Tera-electron-Volt Atmospheric Cerenkov Telescope with Imaging Camera). This is the first-ever Indian imaging gamma-ray telescope, and is being used for high-sensitivity observations of cosmic gamma ray sources above 1 TeV energy.

Chemistry

BARC provides state-of-the-art services to nuclear power plants, research reactors and heavy water plants, and carriers out research in the frontier areas of chemistry.

The Centre also offers specialised analytical chemistry services to various user organizations within DAE and outside. The type of samples analysed cover a wide spectrum of materials such as metals and alloys, organic and organometallic compounds, inorganic compounds, rocks and minerals, nuclear and strategic materials, highpurity materials, environmental and biological materials and others.

BARC's Centre for Compositional Characterization of Materials (CCCM) in Hyderabad provides high quality analytical services to various departmental, governmental and private institutions.

Biology

At Trombay, the research in bio-sciences is directed towards evolving high yielding food crops, delaying or preventing post-harvest losses by increasing shelf life, developing modalities for low dose cancer radiotherapy and employing molecular and isotope techniques in basic biology for disease diagnosis and finger printing of individuals and population.

The National Centre for Biological Sciences of TIFR at Bangalore has been working on research initiatives in the frontline areas of biology.

The Saha Institute of Nuclear Physics, Kolkata is engaged in research elucidating the structure function correlation of biomolecules at the cellular and molecular level.

RESEARCH EDUCATION LINKAGE

DAE supports synergistic interaction amongst the national laboratories and the university systems through a number of mechanisms such as utilsation of DAE's research facilities through Inter-University Consortium, funding of extra-mural research, grant-in-aid to institutes of national eminence, and others.

UGC-DAE Consortium for Scientific Research

DAE and the University Grants Commission (UGC) had signed an MoU (Memorandum of understanding) in 1989 for setting up Inter-University Consortium of DAE Facilities (IUC-DAEF) at Indore. The Consortium, now known as UGC-DAE Consortium for Scientific Research, functions under the control of UGC. The scope of co-operation between UGC and DAE has been broadened to include all programmes pursued by DAE in the area of physical, chemical, life and engineering sciences.

Academic Programmes

The research centres of DAE are recognized by universities as the centres for research leading to postgraduate degrees. A number of scientists and engineers are recognized

as post-graduate teachers by the respective universities. The employees are encouraged to register and obtain research degrees based on the work done in these research centres.

Homi Bhabha National Institute having the status of deemed University, has been instituted in the year 2005 for nurturing the young talents to pursue research activities in nuclear science and technology and allied subjects to meet the future human resource needs of the DAE.

Funding of Extra-mural Research

DAE encourages and promotes scientific research in universities, institutes and laboratories in the areas of relevance to the Department. This is done through the **Board of Research in Nuclear Sciences (BRNS)** and the **National Board for Higher Mathematics (NBHM),** both in Mumbai.

BRNS is an advisory body of the DAE to recommend financial assistance to universities, academic institutions and national laboratories. It supports high quality R&D projects and lays emphasis on collaboroative programmes amongst DAE organisations and the organisations outside the Department. It also provides financial assistance to organize symposia / conferences / workshops on topics of relevance to DAE programmes.

To motivate young scientists to adopt a career of research, BRNS awards projects to them. It has initiated DAE Graduate Fellowship Scheme also. The Board awards Dr. K.S. Krishnan Research Associateships to attract highly talented young scientists and technologists. Its DAE-BRNS Senior Scientist Scheme aims at utilizing the expertise of active retired scientists / engineers who were involved in high quality research in the units of DAE or any National Laboratory or Universites / Institute, and who, after retirement, are keen to carry out R&D in the field of their choice and of interest to DAE. It offers Homi Bhabha Chair to honour distinguished scientists. BRNS also encourages visiting scientist programmes for promoting active interaction with senior level scientists.

BRNS has also introduced “DAE Science Research Council (DAE-SRC) Award” that aims to set up frontier area research units around individuals. During the year 2006-07, the Board approved 90 new research projects.

DAE, through the National Board for Higher Mathematics (NBHM) is enganged in promoting excellence in higher mathematics, education and research in the country.

NBHM operates schemes such as helping the development of mathematical centres, giving scholarships to research fellows at doctoral and post-doctoral levels, travel assistance to young mathematicians for attending conferences / seminars etc., visiting professorship, assistance for research project / schemes, support to libraries, assistance to conferences, monitoring Mathematics Olympiads, and others. In colloboration with the International Mathematical Union, NBHM initiated schemes for making mathematical literature accessible through electronic-communication. During the year 2006-07, an annual budget of Rs. 12 crore was allocated to the Board. One third of the budget of NBHM is released to the mathematics departments of about 80 universities / institutions towards library support for purchase of books of mathematics.

NBHM will be hosting the next International Congress (ICM 2010) in India.

Grant-in-Aid to institutions and cancer hospitals

DAE provides grant-in-aid to seven national research institutes engaged in basic and applied research work ranging from natural sciences, mathematics and astronomy to cancer and fusion research. The Department also supports a society which manages education for the children of DAE employees.

Growing synergy between these research institutions and the research and development units of DAE has led to several joint projects between the DAE units and the aided Institutions.

During the financial year 2006-2007, the grant-in-aid of about Rs. 532 crore was provided by DAE to these institutions.

DAE extends financial assistance to cancer hospitals located in various parts of the country. The financial support provided in this regard during the year 2006-2007 was about Rs. 6 crore. The Department, under a Tripartite Agreement with the North-Eastern Council and the Government of Assam, is further strengthening Dr. B. Barooah Cancer Institute, Guwahati, Assam. The hospital is the regional centre for cancer treatment and control in the North-Eastern Region.

DAE has also initiated Out-Reach efforts in cancer care programme that include creation of better network between cancer institutions in the country focusing on research and development, training and preparation of protocols for treatment, as well as incentive for indigenisation of radiation-related equipment for cancer treatment.

International Research Collaboration

Under a co-operation agreement, signed in March 1996, DAE, through its units, is engaged in development and supply of sophisticated components for Large Hadron Collider (LHC), a particle accelerator under construction by European Organisation for Nuclear Research (CERN) at Geneva, Switzerland.

Under this collaboration, through development done at RRCAT, delivery of over 7000 precision magnet positioning system (PMPS) jacks and about 2000 superconducting corrector magnets, over 1400 Local Protection Units for the LHC was completed by January 2006. Photo-multiplicity detector arrays have been manufactured at VECC, installed, and commissioned at LHC, CERN, Geneva and Relativistic Heavy lon Collider (RHIC) in the Brokhaven National Laboratory of United States. VECC scientists have also participated in experiments, and joined in collaborative data analysis.

RRCAT has also collaborated with CERN on Novel Accelaretor Technologies in the upcoming Compact Linear Collider Test Facility (CTF-3) and super conducting proton LINAC 4 projects at CERN.

CERN and BARC have strong collaborative activites which include supply of 1000 numbers of large area silicon strip detectors for use in Compact Muon Solenoid (CMS) at CERN. About 800 detectors have already been delivered.

At SINP, 80,000 MANAS chips were fabricated and delivered to CERN.

Contributions of DAE and other organisations in India to such activities have eamed the “Observer” status for India at CERN.

BARC has supplied and successfully commissioned RF Reasonator Control Electronics for Super-conducting Linac at the Australian National University, Canberra, Australia.

In the past, BARC had participated in an IAEA sponsored international effort for searching of Sr-90 "orphan sources" at Georgia. The Aerial Gamma Spectrometry System (AGSS), developed by BARC, was deployed in the search operations. The technical superiority of this system in detecting the orphan sources and the expertise of BARC staff in locating the same, and training of the staff of Nuclear Radiation and Safety Services (NRSS), Ministry of Environment, Georgia in the operation of the AGSS system, were highly appreciated by both the Government of Georgia and IAEA.

National Security

On May 18, 1974, India had conducted a peaceful underground nuclear experiment at Pokhran in Rajasthan desert. Here after twenty four years, on May 11 and 13, 1998, India successfully conducted five nuclear tests that included a thermonuclear device, a fission device and three sub-kiloton nuclear devices.

Material Sciences

In the area of material science, the efforts of BARC and IGCAR are directed towards the development of materials for pressure vessels, clad and control elements, multiphase alloys and structural intermetallics, refractory metals and alloys, preparation of radiation sources, ultra high purity metals, and other special applications.

Accelerators

DAE has established capability in design, construction and operation of accelerators used in nuclear research, isotope production and radiation processing. The Variable Energy Cyclotron (VEC) at Kolkata, 14MV Pelletron Accelerator in Mumbai, and Synchrotron Radiation Sources (SRS) Indus I&II at the Raja Ramanna Centre for Advanced Technology (RRCAT) Indore, and Folded Tandem Ion Accelerator (FOTIA) at Trombay, are the major accelerator facilities in the country.

Cyclotrons & Other Accelerators

The **Variable Energy Cyclotron Centre** (VECC) at Kolkata is a national centre for accelerator-based research. The Variable Energy Cyclotron set up here by BARC in 1977, is used for basic research. It also produces radioisotopes for various applications. The Cyclotron is utilzed by over 35 national laboratories and universities.

The Electron Cyclotron Resonance (ECR) ion source at VECC is a unique facility for research with heavy ions. An ECR-2 Ion Source is also connected to cyclotron. The heavy ion accelerator programme has succeeded in providing the heavy ion beams beyond 6 MeV/nucleon. So far oxyen, nitrogen, argon, neon, sulphur ion beams have been accelerated successfully. For the studey of exotic nuclei, an indigenously designed and fabricated Isotope Separator-on-Line (SOL) system is also in operation here.

Currently, VECC is constructing a K500 Superconducting Cyclotron and a Radioactive Ion Beam (RIB) facility for accelearating radioactive ions.

The installation, commissioning, cool down, liquid helium filling, progressive increase of current in the superconducting magnets etc have been accomplished. The maximum current achieved in small coils is 600 amperes and in large coils is 675 amperes. The peak magnetic field achieved is 5.0 Tesla. The magnetic field mapping of particle acceleration zone and analyses of data have been completed.

The Cyclotron was planned for re-commissioning from February 2007.

An ISOL (Isotope Separator On-Line) post-accelerator type Radioactive Ion Beam facility project is also under development at this centre. The facility will utilize proton and alpha beams from the existing cyclotron accelerator and thick targets to produce short lived radioactive species. These will be ionized in an on-line ion source, mass separted for purity and accelerated to higher energies for accelerator-based physics research. The most important Iandmark of this project so far is the successful development of heavy ion REQ (Radiofrequency Quadrupole) accelerator. This is-the first of its kind in India and only a few countries in the world today have this technology. An on-line ECR ion source and on-line isotope separator have been developed, that is working nicely. Significant progress has been made in the research and development of thick target, two-ion-source for the production of high charge state ions, helium jet coupled two stage skimmer system. A special type Linac cavity for acceleration of low energy heavy ions is in the advanced stage of fabrication now. The facility is expected to deliver a few radioactive ion beams from early 2008.

Synchrotron and its Utilization

In the late 80s, accelerator-related research and development in India got a boost with the setting up of the Raja Ramanna Centre for Advanced Technology (RRCAT). It took up the task of setting up two Synchrotron Radiation Sources (SRS). In the first few years, the injector system in the form of a 20MeV microtron and a booster synchrotron (450-700 MeV) were set up. Then the first ring Indus-1, a 450MeV SRS was put together as a national research facility, in 1998. Current was stored in Indus-I, for the first time, in April 1999. This SRS has since been operating routinely.

The work on construction of Indus-2, a 2.5 GeV SRS commenced in the late 90s and the assembly of ring was completed in 2005. The commissioning of this ring, and experiments to store the beam started towards the end of 2005. Indus-2 has now commenced operation and starting with injection of electrons at 550 MeV, a stored current of up to 38 mA was achieved. The beam energy was ramped up to 2.4 GeV.

Only about a dozen countries in the world have the capability in designing and construction of complex accelerators like Indus-2.

FOTIA

For providing light and heavy ion beams for use in basic and applied research in nuclear, atomic and material sciences, BARC had commissioned a Folded Tandem Ion Accelerator (FOTIA) in April 2000 at Trombay. The accelerator is being used for various research and development work.

Pelletron

The BARC-TIFR Pelletron Accelerator Facility at Mumbai, operating for over a decade, has made an impact internationally, in the field of nuclear research. To further increase the beam energy of Pelletron, a superconducting linear accelerator (LINAC) is being set up. The Phase-I of LINAC is operational now.

Other Accelerators

Recently, IGCAR has successfully commissioned at Kalpakkam, a 1.7 million-volt Tandetron accelerator, with high current and heavy ion capability.

The design of a 30 mA, 10 MeV Proton LINAC has been initiated at BARC.

Fusion & Other Plasma Technologies

The Institute for Plasma Research (IPR), Ahemdabad operated ADITYA Tokamak for the studies on high temperature magnetically confined plasmas. These studies have important implications on the nature of particle transport in the edge of tokamaks.

To address physics and technology issues related to advanced Tokamak configurations, SST-1, one of the world's first Superconducting Steady State Tokamaks with elongated diverter plasmas and 1000 second operation capability, isbeing set up at IPR. Most of the sub systems of SST-1 have been fabricated, assembled and individually tested before final assembly. The basic machire itself is now fully assembled and is going through the process of commissioning.

Experts from International Thermonuclear Experimental Reactor (ITER) central team and member countries assessed India's technical capability and preparedness to participate in the ITER project as full member. At the end of successful negotiations India's accession to ITER took place on the December 6, 2005 during Negotiator's meeting at Jeju in South Korea. Also an acceptable package has been allotted to India that includes sub-systems requiring contribution from the Indian heavy industry such as the large cryostat of ITER including erection and commissioning, components for the cooling system, cryolines and components for cryo-distribution system, vacuum vessel shields etc. The Indian package also includes components for high technology systems like Ion Cyclotron heating and Current drive, Electron Cyclotron Start up system, Diagnostic Neutral Beam and some diagnostic systems. It is a matter of pride that the international fusion community has accepted Indian expertise in fusion science and technology at the international standard and shown confidence by accepting India as a member and allocating a demanding package to be delivered.

ITER

Fusion is the energy source of sun and stars. In fusion, two light nuclei (e.g. deuterium and tritium) combine to form a heavier nucleus, and a large amount of energy is released. For the past 50 years, scientists have been working on the development of fusion technologies to generate energy on earth. Fusion has several attractions as a large-scale energy source. Its basic fuels are abundant and available everywhere and the technology is environment-friendly.

Considering the complexity of this technology, Japan, European Union, the then Soviet Union and the United States had established a collaborative project International Thermonuclear Experimental Reactor (ITER) in 1985 to harness fusion energy. China and South Korea also joined the consortium of parties to the ITER venture.

India has had a fusion research programme of its own, since the early eighties. Two tokamaks have been indigenously built at the Institute for Plasma Research (IPR) near Ahmedabad, and a small tokamak has been imported from Toshiba, Japan for the Saha Institute for Nuclear Physics, Kolkata (SINP).

Two years ago, the European Union (EU) encouraged India to join ITER and a team from EU visited India for initial discussions in October 2004. This was followed by further interactions at the international level and approvals at home. Finally India was admitted to the ITER negotiations on December 5, 2005 at a meeting held at Jeju, South Korea.

The ITER project is an international collaborative research project on an unprecedented scale, which will reproduce the fusion reaction on the earth. ITER is the Latin for “the way”.

India will contribute equipment worth nearly 500 million US dollars to the experiment and will also participate in its subsequent operation and experiments. India’s contributions to ITER are largely based on the indigenous experience and the expertise available in Indian industry.

India will be fabricating the 28 m dia, 26 m tall stainless steel cryostat, which forms the outer vacuum envelope for ITER. The vacuum vessel shields made of 2% boron steel and occupying space between the two walls will also be designed and fabricated by India. It will also take up the design and fabrication of eight 2.5 mega watt ion cyclotron heating sources, complete with power systems and controls. It will also take up the fabrication of a diagnostic neutral beam system which will give crucial information about the physics of burning plasmas in ITER. India will also be responsible for a number of other diagnostic subsystems. Finally, India will contribute to cryo-distribution and water cooling subsystems. All this equipment will have to be built with ITER quality standards and in a time frame (approximately ten years) determined by the International Team at the host site in Cadarache, France.

TECHNOLOGY TRANSFER

The researd carried out in DAE research centres is generating several spin-off technologies that are transferred to industry for commerical production. These centres also provide various technical services that are benefiting industry. The recent ones transferred from BARC to industry are on-line domestic water purifier, electrolyzing of reactor channel sealing plug jaws, and improved lascan dia gauge, Medical Analyser Software Technology, Digital Medical Imaging System etc. The technology of nisarg-runa, a biogas plant based on biodegradable waste, has been transferred to about 30 parties. The instrumented pipe inspection gauge is now commercially available to inspect 12-inch oil pipe lines.

BARC has also transferred the technology of the indigenously developed Cobalt-60 teletherapy unit to private entrepreneurs for commercial production.

The Technical Services offered by DAE research centres to industry are related to non-destructive testing, stress measurements, acoustic topography, material characterisation and others.

BARC offers complete range of conventional fabrication and machining, specialized design and development expertise, andco-ordinate machining facilities, for developing sophisticated equipment for various applications. The Centre also provides analytical services for determining radioactivity content, in packed drinking water samples and samples for pharmaceutical companies.

Human Resource Development

In 1957, BARC had started a Training School at Trombay to prepare a select group of young scientists and engineers every year for responsible positions in various institutions and projects of DAE. Since its establishment, over 7000 young men and women from varied disciplines have passed through the portals of the School. They are contributing to all the segments of the nuclear programme.

The School admits about 100 Engineering graduates and Science post-graduates annually, mainly in the disciplines of Physics, Chemistry, Biology &

Radiobiology and Engineering (Chemical, Mechanical, Electrical, Computer, Electronics and Metallurgy). They go through an integrated course for one year, which exposes them to the multi-disciplinary culture of the Department. There is also an additional entry channel via the DAE Graduate Fellowdhip Scheme (DGFS), which operates in collaboration with six IITs. About 40 graduates are sponsored for MTech in these IITs who join the department after obtaining the qualification. This group also goes through a 4-month induction course at the Training School.

The endeavour of the School is to produce an individual in whom there is an integration of a large number of sciences and technologies, that are demanded by any work in atomic energy today.

Some other courses conducted by various divisions of BARC are :

- Radiation Medicine
- Medical Radioisotope Techniques
- Health Physics
- Radiological Physics
- Radiation Protection and Safety of Radiation Sources
- Radiation Safety in Industrial applications of Radioisotopes and X-rays
- Radiography Testing Techniques
- Radioactive Waste management
- Safety Assessment of Waste Disposal
- Radioimmunoassay and its Clinical Application
- Chemical Analysis and NDT Techniques
- Operation / maintenance and Inspection of Research Reactors
- Mutation Breeding of Tropical Crop Plants
- Pesticide Residue Analysis

To cater to the growing demands of DAE, BARC Training School now has affiliates for various specializations. The BARC Training School thus has associated with it the Training Schools at the Centre for Advanced Technology (CAT), Indore, the Nuclear Fuel Complex-Heavy Water Board (NFC-HWB), Hyderabad and the Nuclear Power Corporation of India Ltd. (NPCIL) Training School with centres at Tarapur, Rawathaba, Kaiga and Kalpakkam. Each of these training schools prepare the scientists and engineers for specific tasks as follows.

- CAT Training School is for research and development in lasers, accelerators, cryogenics, superconductors, material science, power electronics and microwaves.

- NPCIL Training School is for training in operation and maintenance of nuclear power plants.

INTELLECTUAL PROPERTY PROTECTION

To protect the intellectual property created during the process of research and development in the R&D organisations of DAE, an Intellectual Property Rights (IPR) Cell of DAE works as a nodal agency for all the IPR related matters including filing of patents within India and abroad.

Cumulatively till date DAE has filed 168 patent applications out of which about 89 patents have been granted and 59 are in force.

International Relations

India is a designated member of the Board of Governors of the International Atomic Energy Agency (IAEA) since its inception. Besides taking active part in policy management and programme of the Agency, India offers training facilities, fellowships, scientific visits, etc. to foreign scientists and provides the services of its scientists for expert assignments to other countries, both through IAEA and to the countries with which we have entered into bilateral agreements for co-operation in the field of peaceful uses of atomic energy.

INDIAN SPACE PROGRAMME

Despite being a developing economy with its attendant problems, India has effectively developed space technology and has applied it successfully for its rapid development and today is offering a variety of space services globally. During the formative decade of 1960s, space research was conducted by India mainly with the help of sounding rockets. The Indian Space Research Organisation (ISRO) was formed in 1969. Space research activities were provided additional fillip with the formation of the Space Commission and the Department of Space by the government of India in 1972. And, ISRO was brought under the Department of Space in the same year. In the history of the Indian space programme, 70s were the era of Experimentation during which experimental satellite programmes like Aryabhatta, Bhaskara, Rohini and Apple were conducted. The success of those programme, led to era of operationalisation in 80s during which operational satellite programmes like INSAT and IRS came into being. Today, INSAT and IRS are the major programmes of ISRO.

For launching its spacecraft indigenously, India is having a robust launch vehicle programme, which has matured to the state of offering launch services to the outside world. Antrix, the commercial arm of the Department of Space, is marketing India’s space services globally. Fruitful co-operation with other space faring nations, international bodies and the developing world is one of the main characteristics of India's space programme.

The most significant milestone of the Indian Space Programme during the year 2005-2006 was the successful launch of PSLV-C6. On 5 May 2005, the ninth flight of Polar Satellite Launch Vehicle (PSLV-C6) from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota successfully placed two satellites - the 1560 kg CARTOSTAR-1 and 42 kg HAMSAT - into a predetermined polar Sun Synchronous Orbit (SSO). Coming after seven launch successes in a row, the success of PSLV-C6 further demonstrated the reliability of PSLV and its capability to place payloads weighing up to 1600 kg satellites into a 600 km high polar SSO.

The successful launch of INSAT-4A, the heaviest and most powerful satellite built by India so far, on 22 December 2005 was the other major event of the year 2005-06. INSAT-4A is capable of providing Direct-To-Home (DTM) television broadcasting services.

Besides, the setting up of the second cluster of nine Village Resource Centres (VRCs) was an important ongoing initiative of the Department of Space during the year. VRC concept integrates the capabilities of communications and earth observation satellites to provide a variety of information emanating from space systems and other IT tools to address the changing and critical needs of rural communities.

INDIAN NATIONAL SATELLITE SYSTEM

The Indian National Satellite (INSAT) system is one of the largest domestic communication satellite systems in the Asia-Pacific region. In the 1980s, it initiated a major revolution in India's communications sector and sustained the same later. The satellites of INSAT system, which are in service today, are INSAT-2E, INSAT-3A, INSAT-3B, INSAT-3C, INSAT-3E, KALPANA-1, GSAT-2, EDUSAT and INSAT-4A, that was launched recently. The system provides a total of about 175 transponders in the C, Extended C and Ku-bands. Being a multipurpose satellite system, INSAT provides services to telecommunications, television broadcasting, weather forecasting, disaster warning and Search and Rescue fields.

The INSAT system serves many important sectors of the Indian economy. Foremost amongst them is Telecommunications sector wherein INSAT is providing Mobile Satellite Service besides providing VSAT services. Today, more than 25,000 Very Small Aperture Terminals (VSATs) are in operation.

Similarly, Television broadcasting and redistribution have been immensely benefited by INSAT. Thanks to INSAT, more than 900 million people in India have access to TV through about 1400 terrestrial rebroadcast transmitters. In addition to this, social development through exclusive channels for training and developmental education has become possible through INSAT. And, a Telemedicine network to take super specially medical services to the remote and rural population has become a reality. The network now covers 152 hospitals—120 remote rural hospitals and 32 super specialty hospitals in major cities. The launch of EDUSAT, India's first thermatic satellite dedicated exclusively for educational services, has provided further fillip to the educational services offered by the INSAT system.

INSAT system is also providing meteorological services through Very High Resolution Radiometer and CCD cameras on some of its spacecraft. This apart, cyclone monitoring through meteorological imaging and issue of warnings on impending cyclones through disaster warning receivers have been operationalised. For this, 350 receivers have been installed along the east and west coasts of India.

INDIAN REMOTE SENSING SATELLITE SYSTEM

India has the largest constellation of Remote Sensing Satellites, which are providing services both at the national and global levels. From the Indian Remote Sensing (IRS) Satellites, data is available in a variety of spatial resolutions starting from 360 metres and highest resolution being 2.5 metres. Besides, the state-of-the-art cameras of IRS spacecraft take the pictures of the Earth in several spectral bands. In future, ISRO intends to launch IRS spacecraft with better spatial resolution and capable of imaging day and night. The satellites of IRS system which are in service today are IRS-1C, IRS-ID, IRS-P3, OCEANSAT-1, Technology Experimental Satellite (TES), RESOURCESAT-1, and the recently launched CARTOSAT-1 capable of taking stereo pictures. The upcoming Remote Sensing Satellite are Cartosat-2, RISAT (Radar Imaging Satellite) and Oceansat-2.

Imagery sent by IRS spacecraft is being put to a variety of uses in India with agricultural crop acreage and yield estimation being one of the most important uses. Besides, such imagery is being used for ground and surface water harvesting, monitoring of reservoirs and irrigation command areas to optimise water use. Forest survey and management and wasteland identification and recovery are other allied uses. This apart, IRS imagery is also used for mineral prospecting and forecasting of potential fishing zones.

With regard to applications in planning and management, IRS data is being used for urban planning, flood prone area identification and the consequent suggestions for mitigation measures. Based on this experience, the concept of Integrated Mission for Sustainable Development has been evolved wherein the spacecraft image data is integrated with the socio-economic data obtained from conventional sources to achieve sustainable development.

LAUNCH VEHICLES

After successfully testing the first indigenous launch vehicle SLV-3 in 1980, ISRO built the next generation Augmented Satellite Launch Vehicle (ASLV). ISRO's Launch Vehicle Programme had a giant leap with the successful launch of IRS-P2 spacecraft onboard the Polar Satellite Launch Vehicle (PSLV) in October 1994. On 18 April 2001, India successfully launched its Geosynchronous Satellite Launch Vehicle (GSLV). Technology development for advanced launch vehicles made good progress with the breakthrough achieved during the year in Supersonic Combustion Ramjet (SCRAMJET) to be employed in Air-Breathing engine. This is an important element in the launch vehicle technology development. Concepts for reusable launch vehicle are also being studied.

POLAR SATELLITE LAUNCH VEHICLE

The four stage PSLV is capable of launching upto 1,600 kg satellites into a 620 km polar orbit. It has provision to launch payloads from 100 kg micro-satellites or mini or small satellites in different combinations. It can also launch one-ton class payloads into Geosynchronous Transfer Orbit (GTO). So far, it has performed nine missions with eight consecutive successes. The latest launch of PSLV (PSLV-C6) was on 5 May 2005 during which the vehicle precisely placed the 1560 kg CARTOSAT-1 and the 42 kg HAMSAT into a 620 km high polar SSO.

GEOSYNCHRONOUS SATELLITE LAUNCH VEHICLE

The GSLV was successful on its very first test flight. After its successful second flight on 8 May 2003, it was commissioned. This was followed by the success of its third flight on 20 September 2004. The GSLV is capable of launching 2,000 kg class satellites into Geosynchronous Transfer Orbit (GTO). The development of Indigenous cryogenic stage to be used as the third stage of GSLV made further progress during the year. The cryogenic engine which forms part of this stage, has already been successfully qualified. GSLV-Mk III, a new version of GSLV and capable of launching spacecraft weighing upto 4 tonnes to GTO is under development.

LAUNCH INFRASTRUCTURE

An elaborate launch infrastructure exists at the Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota Island on the East Coast of India which is about 100 km from Chennai. Sriharikota is located at 13° North latitude. From here, satellites can be launched into a variety of orbital inclinations starting from 18° and extending upto 99°. Full-fledged facilities for satellite integration, assembly and launch exist there. Sriharikota also houses a Telemetry, Tracking and Command network for tracking satellites and monitoring them. The newly built Second Launch Pad at SDSC SHAR as a redundancy to the existing launch pad, and to cater to the requirement of GSLV-Mk III as well as other future launch vehicles, was commissioned on 5 May 2005 with the successful launch of PSLV-C6.

SPACE SCIENCE

India has a vibrant space science programme covering astronomy, astrophysics, planetary and space science, earth science and theoretical physics. As part of that programme, ground facilities like astronomical observatories, Giant Meter Wave Telescope, Mesosphere-Stratosphere-Troposphere Radar facility, etc., have been built. And, Balloons, sounding rockets and satellite platforms are used for flying scientific instruments. India has participated in many international scientific campaigns like MONEX, INDOEX, GBP, etc. ASTROSAT, a multispectral high-energy astronomical space observation satellite is scheduled to be launched by 2008-09. Chandrayaan-1, India's first scientific mission to Moon, envisages orbiting a spacecraft around the Moon at a height of 100 km from the lunar surface for chemical, mineralogical and photo-geologic mapping of the Moon. The spacecraft carries 11 scientific instruments built in India, UK, Germany, Sweden, Bulgaria and the United States. The PSLV is scheduled to launch Chandrayaan-1 spacecraft by 2008.

SPACE-INDUSTRY CO-OPERATION

One of the important features of the Indian Space Programme since its inception has been the co-operative approach with the Indian industries. The Department of Space (DOS) has established linkages with about 500 industries in small, medium and large-scale sectors, either through procurement contracts, know-how transfers or provision of technical consultancy. Because of its association with the space programme, the space industry is now capable of meeting the challenges in terms of adopting advanced technologies or handling complex manufacturing jobs.

INTERFACE WITH ACADEMIC AND R&D INSTITUTIONS

The ISRO has an active programme to interact with academic and research institutions all over the country for the benefit of our space programme. In this regard, the Sponsored Research Programme (RESPOND) is an important component of DOS. Under RESPOND, DOS support research and educational activities at universities, individual colleges, and at the Indian Institutes of Technology as well as other research institutions. During the year 2005-2006, 13 projects were successfully completed and 62 new projects were initiated at 42 academic institutions comprising universities, colleges and research institutions. In addition to research projects, DOS supported 73 conferences, symposia, educational and promotional activities in the areas of importance to ISRO, besides providing support to ISRO-institutional chairs at reputed institutions.

INTERNATIONAL CO-OPERATION

From the days of its inception, ISRO has had a very good record of international co-operation. It has Memoranda of Understanding / Agreements with 26 countries / space agencies. A UN sponsored Centre for Space Science and Technology Education in Asia and the Pacific (CSSTE-AP) set up in India has trained more than 400 personnel of the Asia-pacific region. During the year, CSSTE-AP completed 10 years. In addition, ISRO provides training in space applications to personnel of developing countries through its Sharing of Experience in Space (SHARES) programme.

ISRO has launched scientific payloads of other space agencies like Modular Opto-electronic Scanner of DLR, Germany that was flown on IRS-P3 spacecraft and the data is being shared by scientists of DLR, India and the US. It has a co-operative agreement with NASA / NOAA for the reception of meteorological data from INSAT spacecraft by those agencies.

Megha-Tropiques is a joint satellite mission of ISRO and French Space Agency CNES for atmospheric studies. The satellite will be built and launched by ISRO and CNES will develop two of the payloads and the third payload jointly with ISRO. At the same time, scientific instruments developed in the United States, Germany, Sweden, UK and Bulgaria will be launched on board India's Chadrayaan-1 spacecraft. This apart, an Italian scientific instrument will be included onboard India's OCEANSAT-2 satellite. Instruments for astronomical observation jointly developed with Israel and Canada will be flown onboard India's GSAT-4 and RISAT satellites respectively. And, an Indian scientific instrument to study solar physics and solar-terrestrial sciences will be flown onboard Russia's CORONAS-PHOTON satellite.

India has also set up three local User Terminals and a Mission Control Centre for the international COSPAS / SARSAT programme for providing distress alert and position location service. A search and Rescue Transponder is included in INSAT-3A spacecraft. India is a signatory to the International Charter on Disaster Management and is providing remote sensing data for the same.

ANTRIX

Antrix, the commercial front of the Department of Space, is a single window agency for marketing Indian space capabilities. It is playing a key role in the worldwide availability of IRS data through Geoeye, USA. Antrix also provides IRS data processing equipment.

Antrix offers launch services using India's PSLV. Two German, one Korean and one Belgian satellites have already been successfully launched by PSLV. Through Antrix, Telemetry, Tracking and Command support from the Indian ground stations are offered. Similarly, lease of transponders from INSAT system is possible. In this regard, 11 transponders have already been leased to INTELSAT. Customers for the spacecraft components offered by Antrix include world's leading spacecraft manufacturers.

During the year, an agreement was entered into with EADS Astrium, Paris for the joint manufacture of 2000 kg and 3000 kg class satellite platforms for the telecommunications market. Besides, Antrix won contracts from Europe and Asia for launch services in the highly competitive international markets. After the successful development of a low cost, compact, modular and rugged Automatic Weather Station (AWS) in co-ordination with industry, the technology has been licensed to industry for regular production.

Thus, in addition to successfully developing spacecraft and launch vehicle technologies indigenously, India has also been successful in the application of satellite technology to benefit its national economy. At the same time, India has also been sharing space-based information with the international community and providing commercial space services globally.

INDIAN IT INDUSTRY

The Indian IT-enabled and Business Services (ITES-BPO) have demonstrated superiority, sustained cost advantage and fundamentally-powered value proposition in ITES. Indian companies are expanding their service offerings, enabling customers to deepen their offshore engagements; the shift from low-end business processes to higher-value, knowledge-based processes is having a positive impact on the overall

industry growth. Global software product giants such as Microsoft, Oracle, SAP, etc., have established their captive development centres in India.

The Indian software and services export is estimated at Rs 103200 crore (US$ 23.4 billion) in 2005-06, as compared to Rs 80180 crore (US$ 17.7 billion) in 2004-05, an increase of 32 per cent in dollar terms. This segment will continue to show robust growth in future also. The production of the Indian electronics and IT industry is estimated at Rs 185660 crore during 2005-06, as compared to Rs 152420 crore during the year 2004-05, a growth of 21.8 per cent. The Industry's contribution to the national GDP has risen from 1.2 per cent during the year 1999-2000 to a 4.8 per cent during 2005-06.

India's record on Information security ranks better than most locations. Specific initiatives underway include enhancing the legal framework through proposed amendments to the IT Act 2000 — currently under review by the Government.

The ITES-BPO sector has become the biggest employment generator amongst young college graduates. The number of professionals employed in India by IT and ITES sectors is estimated at 1287000 as of March 2006. In addition, Indian IT-ITES is estimated to have helped create an additional 3 million job opportunities through indirect and induced employment. The increased attractiveness of India as an investment destination in IT has led to the reversal of the brain drain — people of Indian origin who went to pursue careers abroad are now attracted to work in India.

MAJOR INITIATIVES IN INFORMATION TECHNOLOGY SECTOR

National e-Governance Plan

The e-Governance scenario in India has evolved from mere computerization of Government Departments to initiatives which encapsulate the finer points of governance like citizen centricity, service orientation, accountability and transparency. The National e-Governance Plan has played a pivotal role in realization of this vision by focusing on key government services to citizens (G2C) and to businesses (G2B). Broadly, the Plan encompasses nine central Mission Mode Projects (MMPs), eleven state MMPs and seven integrated MMPs that span multiple backend Ministries / Departments. It also includes eight program support components aimed at creating the right governance and institutional mechanisms, core infrastructure, policies & standards and the necessary legal framework for adoption of e-governance.

State Wide Area Network

In March 2005, Department of IT obtained Cabinet Approval for very important e-Governance Core Infrastructure Scheme for an overall outlay of Rs. 3334 crores to be expanded in five years, which would establish Wide Area Networks in 29 States and 6 UTs across the country, from each State / UT Hqr to the Blocks. Implementation of this Scheme is in full swing with individual project proposals approved for 28 States / UTs with the balance proposals to be approved by the designated Empowered Committee by June 2007. Wide Area Networks being established in the States / UTs under this SWAN Scheme, expected to be implemented by March 2008 in all States / UTs, would serve a long way to provide G2G and G2C services in the entire e-Governance echo system, especially for the various Mission Mode Projects contemplated under the National e-Governance Plan.

Common Services Centres (CSC) Scheme

Government of India approved the CSC Scheme for establishment of 100,000+ CSCs across rural India, i.e. one (1) CSC per six (6) vllages, on a Public-Private Partnership

model. The CSCs are envisioned as the front-end delivery points for Government, Private and social sector services to rural citizens of India such as, e-Governance services, e-Agriculture, e-Education, Telemedicine, Rural banking etc. The total cost of the Scheme is estimated at Rs. 5742 Crores out of which Rs. 4093 Crores would come from Private Sector.

e-Bharat

The Government of India has been carrying out a dialogue with the World Bank for an Indian funding support for NeGP to the extent of 300 million in the form of a Specific Investment Loan (SIL) over a four-year period. The proposed assistance (called e-Bharat Project) is expected to finance an agreed-upon sub-set of NeGP projects and components after these have received Cabinet approvel. This Bank loan to the Centre would be passed on as grants to States, subject to their adherence to certain pre-defined guidelines. Additional funding under e-Bharat could be made available based on satisfactory and timely utilization of the initial SIL as per mutually agreed timelines.

e-Readiness

The Department of IT has been commissioning e-Readiness Assessment Report of Indian States & UTs for the past 3 years. These Reports play a significant role in helping states evolve a proactive policy and plan robust ICT infrastructure, and also identifies possible hurdles and suggests plan of action to overcome these, to make giant strides towards creating information societies and participate in knowledge economy. In the Report for 2005, the comparative analysis of state-wise ranking demonstrates the outcome of such policy interventions. The Report examines, using the case study method, whether the e-governance/e-readiness initiatives have integrated or empowered the marginalized section.

Impact Assessment

As an integral part of the Outcome-based approach to policy formulation & project implementation, the DIT, under its e-Assessment strategy has initiated assessment of Impact of e-Governemnt and ICT for Development (ICT4D) projects that provide any measure of e-Government services across India. For this purpose, the DIT has empanelled 11 research agencies. The impact could be social in terms of quality of life, inclusion, access to information regarding benefits etc., economic in terms of either income generation or savings or even empowerment in terms of transparency, Right to Information etc.

e-District

e-District is a State Mission Mode Project under the National e-Government Plan. The Project aims to target certain high volume services currently not covered by any MMP under the NeGP and undertake back-end computerization to e-enable the delivery of these services through Common Service Centres. The implementation strategy of an e-District would suitably take into account the infrastructure currently being created under NeGP such as the SWANs and SDCs. Projects in U.P. and Assam have been sanctioned and implementation initiated. Implementation guidelines are being circulated to States inviting pilot proposals.

Unique ID

A Central database is being created that uniquely identifies all residents across the country. It is primarily aimed at better targeting of beneficiaries under various social sector schemes. Progressive linkages with other major databases such as Household Survey (for BPL families), PDS, etc. would eliminate the need for multiple identification mechanisms presently prevalent across government departments.

State Data Centre

State Data Centre (SDC) has been identified as one of the important elements of the core infrastructrue for supporting e-Governance initiatives of NcGP. It is proposed to create State Data Centres in the States / UTs across the country to provide efficient electronic delivery of G2G, G2C and G2B services. These services can be rendered by the States through common delivery platform seamlessly supported by core Connectivity Infrastructure such as State Wild Area Network (SWAN) and Common Service Centre (CSC) connectivity extended to village level.

The entire schemes for 35 States / UTs shall involve an investment of Rs. 1685 crores and it is planned to establish around 20 Data Centres within the next one year of so.

Community Information Centres

Department of Information Technology (DIT) had taken up an initiative in February 2002 for setting up of Community Information Centres (CICs) in the hilly, far-flung rural areas of the country to bring the benefits of ICT (Information and Communication Technologies) to the people for socio-economic development of these regions and to alleviate the digital divide between urban and non-urban areas. The initiative which was as a follow up to the special package announced by PM (Prime Minister) to the North Eastern States has been extended to Jammu & Kashmir (J&K) in February 2004, Andaman & Nicobar Islands, and Lakshadweep Islands in February 2005. These CICs are a citizen inferface for IT enabled e-Government services and training.

During 2006, CIC at Nathula Pass in Sikkim near the Indo-China border has been commissioned which is the highest internet kiosk. 124 CICs in Jammu & Kashmir, 38 CICs in Andaman & Nicobar Islands, and 30 CICs in Lakshadweep Islands have been made operational.

The social cost benefit analysis of the CICs set up in the 8 North-Eastern States was carried out by National Council for Applied Economic Research (NCAER). Interim provision has been made for financial assistance up to 2 years beyond February 2007 for management of existing 555 CICs of North-Eastern States as a gap bridging arrangement to facilitate their merger into Community Service Centres (CSCs) under the NeGP (National e-Governance Plan). The financial assistance would be available to State Governments agreeing for integration of CICs with CSC Scheme and submit the RFP for CSC Scheme.

IT Initiatives in the North-East

The North-Eastern region of India requires relatively more handholding support in development and technological advancements for harnessing the power of Information Technology in achieving overall development of the region and its people. Government has taken initiatives like Horizontal transfer of successful e-Governance projects of three mission-critical Departments like Land Records,

Property Registration and Transport. Capacity Building Scheme has been designed for States to take forward the State e-Governance Programme with ownership and participation. Further, technical support was provided for preparing the E-Governance Roadmap articulating their e-Governance Mission & Vision, project proposals and roadmaps of individual Departments. As part of comprehensive e-governance initiative all the Departments are being connected under State Wild Area Network. Due to remoteness of certain districts the VSAT / wireless options were also considered. State Data Centers are being planned which will act as a repository of the sensitive data of the State. The present Community Information Centres (CICs) are being upgraded to Citizen Service Centres for providing government services in their locality overcoming the logistic hurdles. Further, on a pilot basis e-district is being introduced for facilitating the citizen services delivery. PPP Model is also being attempted in selective citizen centric system to enhance quality of G2C services and to ensure sustainability. The accrued tangible benefits to the citizens in the North-East will come in terms of employment generation, connectivity to the rest of the world, revenue generation for the State and Information dissemination, boost to Tourism, etc.

Capacity Building

NeGP envisages State ownership in terms of policy, planning and execution of the State e-Governance programme. Capacity Building scheme has been designed to support the State e-Governance initiative by facilitating the creation of 'State e-Governance Mission Teams' for providing technical & professional support. Various specialized training initiatives have also been planned for decision-makers, senior-policy makers and departmental officials associated with e-Governance. Similar teams of professionals will also be set up for every major mission mode projects.

Horizontal Transfer of Successful e-Governance Projects

Horizontal Transfer of Successful e-Governance Initiative is the flagship of e-Governance project. Initiated a few years back, it marked the starting of process reform (as against mere computerization) and outcome-oriented approach to widespread diffusion of e-Governance in the country.

The programme envisaged study of best practices in the areas of Land Records, Property Registration and Transport for replication across the country. Successful implementation in States such as Karnataka, Maharashtra, AP and HP for replicating in other parts of the country on a pilot basis. Pilot project in a State is to serve as a model for statewide rollout.

Since its initiation, the programme covers over 20 States and 34 projects, with a few in the pipeline. Of these over 20 pilot projects have been successfully completed and States like West Bengal, Punjab and Kerala have taken up State-wide rollout following the success of the pilot project. Rollout are predominantly based on PPP resulting in enhanced service level focus and sustainability.

Standards in e-Governance

GOI has set up an Institutional mechanism constituting NIC, STOC, Working Groups with representation from Indsutry, Government and academia with an Apex Body at the top to approve and notify the evolved Standards for E-Governance. Key areas being addressed include Interoperability, Security, Localization and Data standards. The website is http://egovstandards.gov.in

National e-GovernanceServiceDelivery Gateway (NSDG)

This mission project aims at setting up a constellation of gateways across the country which will establish standards-based interoperability between the CSCs at the front and back-end government departments. Acting as a nerve centre, the gateways would handle a large number of transactions across the entire network; provide a common set of specifications and a single point access. Such an infrastructure would also help inter-departmental working in a co-ordinated and synchronized manner. As a central processing mechanism it would also help in tracking all transactions of the Government.

India Portal

The India Portal is envisaged to be a unified portal for accessing information in the State Sector for electronic delivery of citizen services and a major facilitator for implementing e-governance initiatives. The beneficiaries can be broadly categorized as citizens, corporate organizations, both in State and non-state sectors, the Government itself (Central, State and Local body level), media and the world at large. The Portal is envisaged to be a 'single window access' to G2C services across the nation under the NeGP. It is operational at http://india.gov.in/.

In order to provide comprehensive, accurate, reliable contents, National Portal Coordinators (NPC) have been identified from States/UTs and Central Ministries/Departments. India Portal will also be providing multi-lingual content.

Open Technology Centre (OTC)

GOI has initiated the setting up of an Open Technology Centre through NIC aimed at giving effective direction to the country on Open Technology in the areas of Open Source Solutions, Open Standard, Open Processes, Open Hardware specifications and Open Course-ware. This centre will be based in Chennai. This initiative will act as a National Knoweldge facility providing synergy to the overall components of Open Technology initiative that are being taken by various communities and strengthen the support on the Open Technology. The OTC will provide the requisite support to the Standardization activity for e-Governance.

National Resource Centre in FOSS (NRCFOSS)

GOI has set up a Free & Open Source (FOSS) centre in Chennai through CDAC aimed at promoting the growth of FOSS in India through Research, design & development of FOSS product & technologies with the emphasis in the area of e-Governance, school education & SME's. A major achievement has been the development of Linux based Desktop called BOSS with support for Indian languges. Government is also setting up BOSS support centres across the country.

Conformity Assessment Centres

To ensure the citizen confidence and trust in the e-goverance services, quality assurance of e-governance applications is critical. To address this need, GOI through STQC has set up seven IT centres across the country to provide the necessary 3rd party audit services for Compliane and certification of various mission mode projects. This will not only help in enhancing the confidence of the users but the quality of solution itself will get enhanced significantly by removing the anomalies and shortcomings observed during evaluation process.

Electronics/IT Hardware Manufacturing

The Government has identified growth of Electronics and IT Hardware

manufacturing sector as a thrust area in order to encourage investments for setting up Semiconductor Fabrication and other micro and nano technology manufacture industries in India. The salient features of Special Incentive Package Scheme (SIPS) announced by Government vide Gazette Notification No. 78, Part I, Section I dated 21st March, 2007 are reproduced below :

- **Products**
  - All semiconductors and eco-system units, namely displays including Liquid Crystal Displays (LCD), Organic Light Emitting Diodes (OLED), Plasma Display Panels (PDP), any other emerging displays; storage devices; solar cells; Photovoltaics; other advanced micro and nano technology products; assembly and test of all the above products.
- **Technology**
  - State-of-the-art
- **Investment threshold**
  - Semiconductor fab units - Rs. 2500 crores and above
  - Other-eco-system products - Rs. 1000 crores and above
- **Incentives**
  - 20% of capital expenditure during the first 10 years for units in SEZ
  - 25% of the capital expenditure for non-SEZ units. Non-SEZ units shall be exempt from CVD (Necessary customs notification to be issued by Ministry of Finance).
  - Capital expenditure will be the total of capital expenditure in Land, building, plant and machinery and technology including R&D.
  - Incentives offered by State Governments or any of its agencies or local bodies shall be over and above the SIPS.
  - Any unit may claim incentives in the form of capital subsidy or equity participation in any combination of the following.
    - Equity in the project, not exceeding 26%.
    - Capital subsidy in the form of investemnt grant and interest subsidy.

EARTH SCIENCES

In a significant development, the Ministry of Ocean Development was restructured as the Ministry of Earth Sciences on12 July 2006. Further to this the Earth Commission was formed on 9 January 2007.

The Ministry of Earth Sciences will be in charge of matters relating to Ocean Sciences and Technology, Meteorology, Seismology, Climate and Environmental Science and related Earth Sciences. It would facilitate an integrated view of Earth's systems viz. ocean, atmosphere and land to provide best possible services in respect of ocean resources, ocean state, monsoon, cyclone, earthquake, tsunami, climate change, etc. The Ministry will oversee research in earth system sciences, forecast monsoons and other climate parameters, ocean state, earthquakes, tsunamis and earth science phenomena. The ministry will also support industry in science, aviation, water resources, aquaculture, agriculture, etc., by disseminating weather information. It will develop and co-ordinate Science and Technology related to oceans, polar regions besides preserving, assessing and exploiting marine living and non-living resources.

The need for an integrated view and study of Earth Sciences : The formation of MoES comes from the view that an integrated approach or understanding of Earth and Oceans is vital if we have to sustainably and effectively manage earth's energy, water, mineral, soil and coastal resources for our future generation. A stand-alone view of various phenomena will not serve any purpose as any independent model is unable to sustain variability of the complexities involved in the earth and ocean sciences, which are gradually converging. Under the circumstances, it's imperative to understand the interdependence and coupling of Geological Sciences and Oceanography and adopt an integrated approach to arrive at workable ways out of any complex situation. The combined approach to earth and ocean sciences are also the key to predicting and managing natural hazards such as floods, earthquakes, tsunami, landslides and volcanic eruptions.

The Earth Commission – The nodal authority : These complex situations can best be solved through close collaboration among experts from a number of subdisciplines within the broad field and to achieve this objective, the government has also formed an Earth Commission, which will act as a nodal authority on earth sciences. The commission will comprise of maximum of 12 members.

Set up on the lines of Atomic Energy and Space Commissions, the Earth Commission will view in a holistic way phenomena that couple earth, atmosphere and oceans. The Commission will formulate policies of MoES, create suitable executive, networking and legislative mechanisms, approve major projects, budget, etc., and establish recruitment procedures, assess manpower needs and undertake HRD and capacity building.

OCEAN DEVELOPMENT

Under the special initiative taken by the Prime Minister, Late Mrs. Indira Gandhi, Department of Ocean Development (DOD) was created in July 1981 as a nodal and independent department under the direct charge of PM for organising, co-ordinating and promoting ocean development activities. Immediately after the formation of the Department, Ocean Policy Statement was prepared and brought out in 1982. The Ocean Policy Statement is primarily aimed at utilisation of marine living and non-living resources for societal benefits in a sustainable manner.

Considering India's long coastline and 37 per cent of her population deriving benefits from the seas, this was an extraordinary visionary step. Mrs. Gandhi had the foresight to create a full-fledged Department to follow. This was most significant considering the vast EEZ of 2 million square km coupled with additional 1 to 1.5 million of continental shelf estimated to follow as against the land area of 3.28 million sq.km. even some developed countries , with larger maritime areas had not thought of creation of a separate entity or Department as envisioned by Mrs. Indira Gandhi. The luminary and pragmatic vision of Mrs. Gandhi has borne fruits with several strides in Ocean Development with significant landmarks.

Salient features of the Policy Statement and thrust areas include: (a) Exploratory survey, assessment and sustainable utilisation / harnessing of the ocean resources including living, non-living and renewable sources of ocean energy. (b) Technological advances geared to the utilisation and preservation of the marine environment. (c) Development of technology relating to instrumentation, diving systems, position fixing, materials development, oceanic data collecting devices, submersibles, etc. (d) Developmental activities related to integrated coastal and marine area management, coastal community development, etc., with direct

application to the welfare of the society. (e) Establishment of an ocean related information system using indigenous and foreign sources; International co-operation in Ocean Science and Technology. (f) Development of technologies relating to seabed mining, extractive metallurgy and conducting Environmental Impact Assessment studies. (g) Contribution towards front ranking research in polar sciences. (h) Basic and applied research in Ocean Science and Technology, Human Resource Management, creation of Centres of Excellence in academic institutions and public awareness on the potential and uses of ocean.

Considering the need for capacity building and specialised skilled human resources as emphasised in the Ocean Policy Statement, Department of Ocean Development has established national institutes, viz. National Institute of Ocean Technology (NIOT) at Chennai, National Centre for Antarctic and Ocean Research (NCAOR) at Goa, Indian National Centre for Ocean and Information Services (INCOIS) at Hyderabad, Project Directorate, Integrated Coastal and Marine Area Management (PD-ICMAM) at Chennai and Centre for Marine Living Resources and Ecology (CMLRE) at Kochi.

The Vision Statement highlighting the Perspective Plan 2015 of the Department of Ocean Development was formulated in the year 2002 stipulating the Vision, the Mission, the Mandate and the Priority Areas, to be pursued by the Department over the next decade. A number of new initiatives have been introduced during the 10th Five-Year Plan period, which inter alia include Gas Hydrate Exploration and Technology Development for Assessment, Comprehensive Swath Bathymetric Survey of Indian EEZ, Geophysical study of Laxmi Basin, etc. Further, considering the devastating effect of Tsunami in Andamans and east coast, a new major initiative for setting up Tsunami Warning System for Indian Ocean has been taken up. The major programmes of the Ministry being implemented during the 10th Plan are described below:

ANTARCTIC EXPEDITION AND POLAR SCIENCE

The Antarctic Research Programme, which was initiated in 1981, has taken the shape of a major national programme that has a distinct multi-institutional and multi-disciplinary approach. So far 26 scientific expeditions have been launched on a regular basis. In addition, three expeditions to the Southern Oceans for carrying out research in the thrust areas of polar science including a Weddel Sea Expedition and Krill Expedition for assessment of Krill Resources in Antarctic waters, were also undertaken. The Indian station Maitri situated in the Central Droning Maud land of east Antarctica has provided a platform to more than 1,500 personnel drawn from about 75 national laboratories, institutes, universities, survey and service organisations to conduct experiments in all major disciplines of polar sciences. This is an outstanding example of networking national facilities and expertise. The expeditions to Antarctica are organised every year by National Centre for Antarctic and Ocean Research(NCAOR) an autonomous institution of the Ministry set up at Goa. NCAOR is the first institute of its kind in the country completely dedicated to all the aspects of polar research. Scientific experiments being carried out at Antarctica are in the field of Measurements of Greenhouse gases, Tele Seismic studies, Permanent GPS Tracking Station at Maitri, Study of Crack propagation on Ice Sheet, and Communication at Maitri. ORV Sagar Kanya also conducted experiments in the Southern Ocean. In the 25th Indian Antarctic Expedition which left from Cape

Town November 2006, two students and one Scientist representing a private research centre, participated for the first time. Dakshin Gangotri Glacier, which has been monitored by Indian Scientists for the last 23 years in Antarctica has been declared as an Antarctic Specially Protected Area (ASPA) by the governing body of the Antarctic Treaty in its XXVIII Antarctic Treaty Consultative Meeting (ATCM) held in Stockholm in June 2006. An Ice Core Laboratory to study the ice cores brought from the Antarctica, has become fully operational at NCAOR, Goa.

OCEAN OBSERVATIONS AND INFORMATION SERVICES (OOIS)

Change is believed to be one of the potential factors for causing variation in the weather pattern resulting in droughts, floods, and extreme heat conditions in various parts of the world. The understanding on climate variability is an imperative need for India as monsoon plays an important role in the economy. Although the oceans play an important role in the climate change, the symbiotic connection between ocean and atmosphere particularly in terms of exchange of heat and mass is not well understood. Recognising the importance of information and knowledge of the seas, an integrated programme on Ocean Observations and Information Services has been launched targeting at (i) development of a wide range of ocean-atmospheric and coastal models, (ii) generation of algorithms for retrieval of satellite parameters, (iii) augmentation of ocean observations including in-situ and satellite measurements, and (iv) operationalisation of ocean advisory services. The OOIS consists of four major components, viz. Ocean Observing System, Ocean Information Services, Ocean Modelling and Dynamics (INDOMOD) and Satellite Coastal Oceanographic Research (SATCORE).

Ocean Observing System (OOS) : The Global Ocean Observing System (GOOS) of the Intergovernmental Oceanographic Commission, co-sponsored by WMO, UNEP and ICSU, is an internationally organised system for gathering, co-ordinating, quality control and distribution of marine and oceanographic data and derived products of common worldwide importance and utility as defined by the requirements of the broadest possible spectrum of user groups. It is recognised that one of the most important means of implementation of GOOS is through the development of regional alliances, which are able to focus on issues of common national or regional interest. Under the National Data Buoy Programme (NDBP) being implemented by the National Institute of Ocean Technology (NIOT), 30 moored data buoys were deployed in the Indian seas both in shallow and deep waters to cater to the needs of real time data in respect of India Meteorological Department, Coast Guard and supply of data to a variety of applications like port activities, harbour / offshore-structure development, satellite data validation, environmental monitoring, climate studies, etc. The data buoys are now being developed indigenously to meet the requirement of additional buoys. Besides, India is co-ordinating the International ARGO Project of the Indian Ocean that would provide periodic profiles of temperature and salinity of the upper ocean up to a depth of 2000 metres to understand the structure and dynamics of the upper ocean that influence climate. India has assumed the leadership in the region and is responsible for deployment of ARGOs in the entire Indian Ocean. A Regional ARGO data Centre has also been established at INCOIS, Hyderabad for archival and dissemination of ARGO Data. During the year a set of six argo data products are being made available through INCOIS web site besides dissemination of processed data for the floats.

India has led the establishment of a regional alliance Indian Ocean component of Global Ocean Observing System (IOGOOS) and achieved the leadership in Indian Ocean for ocean observations. This is a major milestone towards understanding the oceanic processes of the Indian Ocean and their application for the benefit of all people in the region. IOGOOS is intended to elevate the Indian Ocean from one of the least studied to one of the most studied of the world's major oceans, with a real emphasis on the link between societal and scientific issues. India is an elected Chairman of Inter-Governmental Oceanographic Commission. India is an elected chairman of IOGOOS that has 24 members / associate members from 13 countries and the IOC. The IOGOOS Secretariat has been established at INCOIS, Hyderabad. So far India has deployed 107 ARGO floats out of planned 150 floats during Tenth Plan period.

Ocean Information Services (OIS) : Under the programme on Ocean Information Services, near real-time data and data products such as Sea Surface Temperature (SST) and Potential Fishing Zone (PFZ) advisories delimiting features like upwelling zones, maps, eddies, chlorophyll, suspended sediment load, etc., consultancy services to the Central Government, States, corporate sector industries, are being made available to the user agencies under one roof. The concerted efforts of our Scientists from Ocean Development, Space and Fishery Science over the last five years have culminated in a unique service to provide reliable and timely potential fishing zone advisories using satellite data to the fishing community of the entire coastline of the country in a mission mode. Potential Fishing Zone (PFZ) Advisories are disseminated thrice a week to over 225 nodes located in various states, viz. Gujarat, Maharashtra, Karnataka, Goa, Kerala, Tamil Nadu, Andhra Pradesh, Orissa, West Bengal, Lakshadweep as well as Andaman & Nicobar Islands. Frequent and intense interactions between the scientists and fishing community at the fishing harbours, and use of a wide range of media such as fax, telephone, electronic display boards, satellite radio and internet have ensured that these advisories provided in the local languages become part of the value chain of the fishing community. A dynamic website has also been established at INCOIS for dissemination of a variety of application (http / / www.incois.gov.in). In addition, INCOIS has been providing Ocean State Forecast on experimental basis to various stake holders.

Currents 3 parameters, i.e. Waves, Swell and Tidal currents are being made available through INCOIS web site. Currently PFZ information is also being disseminated through electronic display boards instituted at 20 local beaches and dissemination through a wide range of media: print, Newspaper, TV, Radio, etc.

Ocean Dynamics & Modelling and Satellite Coastal and Oceanographic Research (INDOMOD & SATCORE): During the Tenth Five-Year Plan, INDOMOD and SATCORE and Ocean Observations programmes have been integrated in a focused way towards development of models. Accordingly, selective deployment of drifting buoys, current meter arrays and Expendable Bathythermograph (XBT) surveys are planned for generation of surface oceanographic and meteorological data. These observations are intended primarily for validation of ocean atmospheric models. A set of 3 current meter arrays has been established in the equatorial Indian Ocean to acquire long-term time series data for understanding the climate variability. This endeavour is being executed with the help of 10 reputed natural pioneer Research / Academic institutes.

Under the project on INDOMOD, several models have been developed for study of open and coastal ocean processes and coupled ocean-atmospheric processes. The primary applications of these models are prediction of monsoon variability,

storm surges associated with cyclones, waves, biological productivity and coastal processes.

Under the programme on Satellite Coastal and Oceanographic Research, algorithms and software are developed for atmospheric correction of Ocean Colour Monitor (OCM) data, bio-geo-chemical parameters, OCM data processing, etc., and validation of experiments. A dynamic web site of the Indian National Centre for Ocean Information Services (INCOIS) with Web GIS and query facility was developed and implemented for Ocean State Forecast. Some of the ocean atmosphere models developed under this project have already been implemented.

MARINE NON-LIVING RESOURCES

The Polymetallic Nodules (PMN) Programme is a national programme aimed towards refinement in assessment of nodules in the 75,000 sq. km area retained by India in the Central Indian Ocean Basin (CIOB) and development of technologies for mining and extraction of metals from nodules. India as the first registered "Pioneer Investor" has to undertake different developmental activities for exploration and exploitation of polymetallic nodules towards fulfilment of the obligations relating to development and transfer of technology and training in the use of technology, etc. Ever since India attained this status in 1987, efforts were on for survey and exploration, technology development for mining of nodules, extractive metallurgy and EIA studies. This programme consists of four major components, viz. Survey and Exploration of nodule in the CIOB; Environmental Impact Assessment Study at the mine site; Development of technologies for mining of nodules and Extraction of metals.

The Survey and Exploration endeavour is aimed at firmly establishing the nodule resource and validating the resource assessed for updating relative concentration and quality characteristics of the Polymetallic Nodules. Survey and Exploration activity was carried out at a close grid in selected marginal blocks. In addition, updating of geo-statistical resource evaluation based on 6.25 km grid sampling in selected blocks has been undertaken and an area of 17,500 sq.km have been outlined in the retained area comprising consistently high grade abundance for First Generation Mine Site (FGM).

As a part of the ongoing Environmental Impact Assessment study, CTD and Rosette observations near seabed at the test and reference areas were carried out. The box corer samples at the test and reference areas were collected. The monitoring of environmental parameters by collecting samples at the test and reference areas is also carried out and appropriate data bases created .

Deep-sea technology and ocean mining group in the National Institute of Ocean Technology (NIOT) is responsible for the development of technology for mining of polymetallic nodules from the seabed and other underwater components. As a part of technology development for underwater mining, a shallow bed mining system was designed, developed and tested at 451 m water depth successfully for a second time. In relation to metallurgy, a semi-continuous demonstration pilot plant to process 500 kg per day of polymetallic nodules to validate the process package developed for extraction of metal values from nodules at Hindustan Zinc Limited (HZL), Udaipur was commissioned in March 2003 and campaigns to validate process routes are continuing. The first process route developed by RRL(B) for extracting the metals has been tested successfully and the activities are progressing to test the process tools of other organisations and to improve the metal extraction. The

Department collected about 120 tonnes of nodules from Central Indian Ocean Basin (CIOB), which were consumed for the metallurgical demonstration campaigns. The data generated during the demonstration campaigns is being used for evaluation and validation of process package already developed. R&D activities for efficiency optimisation for extraction of metals, viz. Cu, Ni, Co and Mn were continued. Regional Research Laboratory(RRL), Bhubaneswar and Hindustan Zinc Limited (HZL), Udaipur are pursuing the R&D efforts for optimising the metal recovery / processing steps. National Metallurgical Laboratory, Jamshedpur continued its endeavour for improvement of recovery efficiency for roast reduction ammoniacal leach route in addition to recovery of Manganese as ferro-silico manganese from the waste generated by RRL process route. Another pilot plant is coming up at NML(J) for production of ferro–sillico–manganese. Ore from the residue has been obtained from HZL plant.

MARINE LIVING RESOURCES

Assessment of Marine Living Resources : The programme on Assessment of Marine Living Resources was initiated during 1997 and the Centre for Marine Living Resources and Ecology, Kochi is implementing the programme. It envisages evaluation of existing information on marine living resources, correlating it with the influence of physico-chemical parameters on the biota, identifying the gaps and formulating future strategies for sustainable exploitation of marine living resources in the EEZ. Fisheries and Oceanographic Research Vessel Sagar Sampada is undertaking the studies in the Indian Exclusive Economic Zone. The studies pertain to the assessment of environmental parameters, primary and secondary productivity, upwelling, investigation on toxic algal bloom, biomass stimation, distribution pattern of species at different depths in the EEZ carried out on seasonal basis. Studies on deep scattering layers, resources assessment and biology of deep-sea fishes in the continental slope and harvest technology and catch composition studies using different trawling techniques including the gear selectivity, and benthic productivity studies including the investigations on sediment texture were also envisaged. Besides, studies on bioluminescence of plankton, screening of antifouling compound, plankton biodiversity, black lip pearl oyster farming including near-shore dynamic are being carried out under the programme through CMLRE, Kochi.

MARINE ENVIRONMENT AND COASTAL ZONE

Coastal Ocean Monitoring and Prediction System Programme(COMAPS) : The Ministry of Earth Sciences is continuously carrying out the research activities of monitoring the coastal water quality on long-term basis in order to understand the trend of pollution level. There are 25 parameters on physical, chemical, biological and microbiological characteristics of water and sediment being sampled at 81 transects / locations (the number fluctuates based on the pollution levels in the transects) at various frequencies with the participation of 10 reputed National Laboratories and Universities. The coastal state-wise scenario of pollution sources and its trend based on the data collected till 2004 proved that quality of coastal waters beyond 2 km is found to be clean except Mumbai, where it is beyond 5 km from the shore.

In addition to regular monitoring of coastal waters, the data base on GIS is being developed on marine pollution and analysis of pesticide residue in the edible marine organisms under COMAPS programme. The residue in Indian sea food was found very well within the permissible limits.

COASTAL RESEARCH VESSELS

The Vessel Management Cell (VMC) of National Institute of Ocean Technology operates, maintains and manages the two coastal research vessels, namely, Sagar Purvi and Sagar Paschimi. These vessels are being used for pollution monitoring under Coastal Ocean Monitoring and Prediction System (COMAPS), data buoy programme and also for Integrated Coastal and Marine Area Management programmes. Further, these vessels are being utilised by over 15 institutions along the west and east coasts of India by effectively utilising the ship times for various programmes.

INTEGRATED COASTAL AND MARINE AREA MANAGEMENT

During the Tenth Plan period, programmes such as "Shoreline Management", "Tidal Inlets Management", "Ecosystem Modelling", "Marine Ecotoxicology", "Application of Ocean Colour Monitoring in sediment transport studies", have been formulated and are being implemented. In addition, the Ministry has expanded its activities on the following areas for detailed investigations:

(i) The coastline of the country has been facing severe erosion in the states of Kerala, Tamil Nadu, Andhra Pradesh and West Bengal and in Union Territories of Pondicherry, Andaman & Nicobar and Lakshadweep.

(ii) The ICMAM programme on "Shoreline Management" presently aims to fulfil understanding of the coastal processes at Ennore (Tamil Nadu), Munambam to Kayamkulam (Kerala) and along Gahirmatha coast (Orissa) where shoreline changes are prominent in the last few years.

(iii) A number of new Ports, both minor and medium are being planned along the coastal areas. Since the port structures like jetties and breakwaters are likely to cause adverse impacts such as erosion, ICMAM-PD would conduct training programme especially on adoption of EIA guidelines and development of environment management plans to the coastal states and R&D institutions through capacity building programmes.

The ICMAM Project Directorate has planned to carry out modelling of propagation of tsunami waves and their inundation in the coastal areas as a part of the programme of Tsunami Early Warning system. This programme is likely to be continued during the Eleventh Plan. As a part of this programme, development of model Coastal Risk Atlas for each State / UT will be incorporated containing details of location of hazard line and risk areas including infrastructure and establishments at risk. Concerned coastal state agencies will be trained to develop similar Atlas for other areas in the State / UT.

Development of potential drugs from the Ocean : The National Project on "Development of Potential Drugs from the Ocean" was taken up for implementation from 1990-91 with a view to harnessing the potential marine flora and fauna for extraction of drugs for medicinal purposes. The research activities include: Systematic collection and identification of marine organisms, extraction and evaluation of medicinal properties of products derived from marine organisms till completion of clinical trials and development of products from the pure molecules. The nodal Institute, Central Drug Research Institute, Lucknow has been entrusted the responsibility of co-ordination and implementation; reconfirmation of bioactivity encountered by the other participating Institutions, elucidation of chemical structure by way of spectrometry and high throughput screening, testing in laboratory animal

models, etc., so as to utilise their international standard infrastructure facilities and their expertise.

The Ministry has re-orientated this programme with the focus on exploratory and product development activities and initiated action to induct more institutional participation including pharmaceutical industry. Collection of wide range of marine organisms even from deep sea and islands and screening for different bio-activities (viz., (i) Anti-cancer; (ii) Immuno-modulatory; (iii) Anti-hyperglycemic; (iv) Wound healing; (v) Anti-fungal; (vi) Anti-protozoal; (vii) Antibacterial; (viii) Anti-inflammatory; (ix) Anti-viral; (x) Anti-hyperglycemic; (xi) Anti-hyperlipidemic; (xii) Spasmolytic; (xiii) CNS; (xiv) Pesticidal and Anti-allergic) and routine experiments and defined protocols both for pre-clinical and clinical studies are being carried out continuously. The assays for the drug / metabolite(s) concentrations in bio-samples are developed and validated as per the international guidelines.

Achievements made so far : Under this programme more than 6500 marine samples have been collected and screened. At least three potential drugs are identified which are in advanced stages of development. The anti-diabetic compound is in clinical trial, Phase-I. The remaining two compounds having combined potentials for anti-hyperglycemic-cum-anti-hyperlipidemic activities, are found to be safe as per the analysis of regulatory pharmacology. Four more new leads [(a) Anti-hyperglycemic; (b) Anti-hyperlipidaemic (c) Anti-fungal; and (d) Anti-viral] are in pipeline for further optimisation of various pharmacological activities.

Development of GIS based information system for 11 critical habitats: To assess the status of some of the critical coastal habitats like coral reefs, mangroves, etc., and to suggest suitable management plans for protection, conservation and restoration, Development of Information System using GIS was taken up during the 9th plan period. Development of GIS based information system for 11 habitats namely, Gulf of Khambat, Karwar islands, Gulf of Kachchh, Cochin island, Sunderbans, Malvan, Kadmat island, Gulf of Mannar, Pichavaram, Coringa and Gahirmatha was also taken up. The application of GIS as a tool for assessing the status of the critical habitats, such as mangroves, coral reefs, sea grass beds, wetlands and other coastal eco-systems, has revealed that more than the natural causes, the human perturbation has resulted in severe damage to these eco-systems. Based on the extensive studies carried out by the Project Directorate (PD), ICMAM on Development of GIS based Information System for these critical habitats, a number of suggestions / recommendations have been made to the coastal states for conservation and management of these critical habitats, based on sustainability principles.

Development of Guidelines for Environmental Impact Assessment : Guidelines have been developed for conducting Environmental Impact Assessment studies in the Ports and Harbours and Marine transportation sectors, tourism related activities in the coastal marine areas, waste disposal from domestic and industrial sources including discharge of waste through pipelines, etc.

Development of model ICMAM plans for Chennai, Goa and Gulf of Kutch : The draft ICMAM plan for Chennai has been finalised based upon the comments received from various stakeholders on the report. A Decision Support System (DSS) was developed to address the cross-sectoral issues like accretion / erosion, pollution, tourism and human settlements by selecting Ecology, Environment and Economy

as the criteria. Various options of the interventions such as provision of training jetties to keep open the tidal inlets, beach nourishment to protect the coast from erosion and effluent treatment to improve the water quality, were analysed using DSS. The design, structure and basic requirement of DSS including Activity, Impact, Entity and Attribute (AIEA) inputs were finalised towards the preparation of Model ICMAM Plan for Goa and Gulf of Kachchh. Further, a prototype Decision Support System (DSS) for Chennai has also been developed as a standalone package in Windows environment. This package contains a powerful user interface and thus facilitates the decision-makers to identify the various coastal activities and their cross impacts on ecology, economy and society and evaluates best strategies in a digital framework in a user-friendly environment.

Marine Eco-toxicology and R & D activities have also been undertaken during the Tenth Five-year plan period. The main aim of this study is to develop specific habitat / water quality criteria to facilitate better management of marine and associated ecosystems in view of growing problems like pollution and waste disposal, etc. so that the levels prescribed for various chemical elements in this criterion / standard can be properly assessed for their suitability for coastal waters and specific ecosystems like corals, mangroves, etc. As a part of eco-toxicological studies, to assess the toxic effects of pollutants and their tolerance levels in marine organisms during the Tenth Five-Year Plan period, involving various universities and research institutes, a Trace Metal laboratory has been set up, aiming at delineating the toxic effects of metals and their threshold limits on various marine organisms. This infrastructure will serve as a National Facility.

The PD-ICMAM is now equipped with state-of-the-art computing facility and training facility to house a long-term training programme for utilising the capacity built under the Capacity Building Programme. The training is provided to the coastal states in the development of ICMAM Plans and use of GIS in the management of critical habitats. Further R&D activities included determination of Best Designated Use Classification of Coastal Waters, Coastal Habitat Studies, Shoreline Management and Satellite Based R&D Programme.

MARINE RESEARCH AND CAPACITY BUILDING

The Ministry of Earth Sciences (MoES) lays special emphasis on encouraging basic and applied research in ocean related subjects with focus on assisting the Universities and building up a skilled human resource base in Marine and Atmospheric Sciences. The objective of this programme is to encourage research in newly emerging and front line areas of Marine Geology and Geophysics, Marine Biology, Marine Ecology, Exploration and Exploitation of Marine Resources, Coastal Engineering, etc. with a view to creating infrastructure facilities in Universities and to inculcate scientific temper among the people in relation to marine science and technology.

Presently, about 40 research and development projects are being supported in the interdisciplinary field of Marine and Atmospheric Science and Technology. This includes projects being supported under the Ocean Science and Technology Cells set up at Goa University, Mangalore University, Madras University, Andhra University, Annamalai University, Cochin University of Science and Technology, Bhavnagar University, Berhampur University and IIT Kharagpur. In addition, projects in the field of biodiversity, biostratigraphy, ridge geology, polar sciences, gravimetry and climatology are also being supported outside the OSTC system.

COASTAL COMMUNITY PROGRAMMES

Island Development : The emphasis of this programme is on building up of infrastructure and expertise in Ocean Science and Technology for Islands through development and transfer of technology in the area of marine living resources, which will bring in socio-economic benefits to the island community. Several experiments have been carried out under the programme being implemented by National Institute of Ocean Technology in the following areas: (a) Fattening of spiny lobsters and mud crabs; (b) Biochemical analysis of lobsters and live feeds; (c) Water quality and disease management; (d) Spawning and larval rearing; and (e) Survey of lobster resources in Gulf of Mannar and Andaman Islands. Various infrastructure facilities were also developed at the Andaman and Nicobar Centre for Ocean Science and Technology, National Institute of Ocean Technology, Port Blair.

INTERNATIONAL PROGRAMMES

Law of the Sea : The Department of Ocean Development is the nodal agency for implementation of the provisions of United Nations Convention of the Law of the Sea (UNCLOS), in India. UNCLOS is an important instrument, which establishes the framework and mechanisms for management of oceans. India ratified the Convention in June 1995. With coming into force of United Nations Convention on Law of the Sea, the institutions such as International Seabed Authority (ISBA) and Commission on the Limits of Continental Shelf(CLCS) came into existence. Recently India has been re-elected in the Commission on the Limits of Continental Shelf for the second term for a period of 5 years from 2007. India is elected on all the institutions established under United Nations Convention on Law of the Sea. viz. International Seabed Authority, Commission on Limits of Continental Shelf and International Tribunal on Law of the Sea. India regularly participates in the meetings of ISBA, CLCS and also in the meeting of States Parties on Law of the Sea (SPLOS) and continues to play the key role in decision making in matters on Law of the Sea.

Delineation of Outer Limits of Continental Shelf : According to the provisions of United Nations Convention on Law of the Sea (UNCLOS), the coastal State that intends to delineate the outer limits of the continental shelf beyond 200 nautical miles is required to submit particulars of such limits along with the supporting scientific and technical data. The UNCLOS came into force in November 1994 and India ratified it in June 1995. If delineation is properly undertaken, India would be in a position to gain substantial area beyond the EEZ. It is required to be submitted by May 2009 and would be examined by the Commission on the Limits of Continental Shelf (CLCS). The National Centre for Antarctic and Ocean Research (NCAOR) at Goa, an autonomous body under the DOD, is co-ordinating this national endeavour with active co-operation and participation of all national institutions.

Inter-governmental Oceanographic Commission : Established in 1960 under UNESCO, the Inter-governmental Oceanographic Commission (IOC) is promoting global co-operation in marine scientific investigations, ocean services and capacity building in developing countries through the concerted efforts of all the 127 member states. India through its continued participation in IOGOOS, is contributing to the growth of oceanographic research and services.

COMNAP / SCALOP / ATCM Meetings: After becoming a member of the Antarctic Treaty, India continues to participate in the meeting of the Council of Managers of National Antarctic Programme (COMNAP) and Standing Committee of Antarctic and Logistic Operations (SCALOP), Antarctic Treaty Consultative Meeting (ATCM)

and Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).

Bilateral / Multilateral Programmes : India signed bilateral agreements with several countries including Russia, China, Portugal and Mauritius in the last 5 years and has successfully implemented collaborative programmes in Myanmar, Mauritius, and Seychelles in the field of Ocean Science and Technology. India organised 5 days training programme for Sri Lanka and Myanmar on Delineation of Outer Limits of Continental Shelf at NCAOR, Goa. Ministry has also taken initiative to participate in India, Brazil-South Africa collaboration.

NEW INITIATIVES DURING TENTH PLAN

Low Temperature Desalination Plant : The first ever Desalination Plant in the world to produce one lakh litres per day freshwater based on Low Temperature Thermal Desalination principle was successfully commissioned at Kavaratti, Lakshadweep islands by National Institute of Ocean Technology, Chennai, an autonomous institution of Department of Ocean Development. The generated fresh water was distributed to the local population by Lakshadweep Administration.

Establishment of Early Warning System for Tsunami and Storm Surges in Indian Ocean region: The coastal population being the victims of Storm Surges and Tsunami, it is obvious that the systems for their mitigation have several commonalities (in terms of observational network, data base on bathymetry and coastal topography, data communication, dissemination of warnings, training and education, operational practices). Considering this, the Government is setting up an Early Warning System for Tsunami and Storm Surges in Indian Ocean region with the available expertise suited to India for areas that may affect its coasts by September 2007. This involves strengthening of the existing seismological network to indicate near real time occurrence of a tsunamigenic earthquake, installation of tsunami warning sensors close to the ocean bottom at appropriate locales in the Indian Ocean, with real time connectivity, tide gauge and data buoys networking, modelling of the inundation scenarios for the entire coast, and establishment of a centre at Indian National Centre for Ocean Information Services, Hyderabad for collection of the information, analysis and generating status advisories.

Pending the commissioning and operation of the National Early Warning System, to take care of any exigencies an Interim Tsunami Warning Centre (ITWC) has been established at Indian National Centre for Ocean Information Services (INCOIS), Hyderabad and is operational round-the-clock with active support of India Meteorological Department (IMD) / Department of Science and Technology (DST), Japan Meteorological Agency and Pacific Tsunami Warning Centre. ITWC is receiving tsunami watch advisories from Japan Meteorological Agency and Pacific Tsunami Warning Centre within 30 minutes after the earth quake in Indian Ocean.

Comprehensive Swath Bathymetric Survey of entire Indian EEZ : The area of our Exclusive Economic Zone is over 2 million sq. km. and abounds with various living and non-living resources. This new programme entails scientific mapping of this area to have an inventory of potential resources and to identify the causes of hazards. The study would help to develop innovative concepts on submarine fans and their role on accumulation of hydrocarbons, submarine canyons and their role in transport and distribution on pollutants, islands- understanding of submarine landslides and stability of coastlines, sedimentary processes- effect on fisheries and biogeochemical cycling, sediment failure along slopes and their effects on

communication cable links across the seafloor, tectonics of margins, etc. In this regard, the shallow water surveys are continuing being carried out by NIOT & NIO.

Gas Hydrates Exploration and Technology Development : With ever-increasing gap between demand and indigenous production of natural gas and the huge import bill incurred by India, it is necessary to look for alternative resources, viz. Gas Hydrates. Gas hydrates are ice like crystalline accumulations formed mainly from methane and water. Gas hydrates are stable, in permafrost regions and in low temperature - high pressure regimes of the continental margins. Considering the immense potential of Gas hydrates in relation to providing total energy security to our nation, a new programme on "Studies on Gas Hydrates Exploration" has been taken up in the Tenth plan for implementation. The programme consists of both scientific and technology development for gas hydrates. The Ministry, in association with CSIR and other laboratories, is focusing on scientific research with special emphasis on resource extent evaluation and environmental impacts and development of technology for detection and qualification of gas hydrates in sediments. Two tentative sites have been identified in Krishna Godvari Delta for detailed investigations. Further two joint expeditions to Lake Baikal have been carried out by Indian and Russian Scientists for exploration of Gas Hydrate.

Geophysical Study of Laxmi Basin : Buried beneath the Indus Fan sediments, the Laxmi Ridge is a prominent bathymetric feature off the north-eastern Arabian Sea. The nature of the basement flooring of the Laxmi Ridge and the Basin itself remains an enigma. The major reason for this ongoing debate is the lack of comprehensive geophysical / geological data prohibiting the decisive study of the region. To establish conclusively the nature of basement in the Laxmi Basin as well as in the area to its north and south, detailed geophysical surveys along the entire West Coast margin upwards of the northern extremity of the Chagos - Laccadive ridge were carried out. Activities pertaining to analysis and interpretation are in the advanced stage of completion.

Acquisition of New Research Vessel : The Department's focus in the next 5 years will be to develop sustainable technology for the exploitation of various non-living resource and a suitable platform is required for technology services and demonstration programme. Accordingly, a programme for acquisition of a new multipurpose vessel for technology services and demonstration has been initiated. Construction of the vessel is presently being carried out in Italy. The vessel is scheduled to be delivered in September 2007. This vessel will also augment the capacity need of the marine living and non-living resources programme of the Department.

Buoy Tender Vessel – Sagar Manjusha : Recognising the importance of real time data from the seas around India for various operational weather forecast and monsoon, the department had launched a comprehensive ocean observational network. Under the programme, a wide range of ocean platforms, viz., buoys, argo floats, drifters, current meter arrays, and XBT are being deployed in selected locations. These Ocean Observation Platforms such as Data buoys, Argo floats, etc. constitute a valuable and primary source of met-ocean data from remote ocean areas. Ocean Observations Platforms are essential for Maritime Safety Information forecasts and warnings. The buoy data would be useful for wide spectrum of end users like Meteorologists, Oceanographers, Environmentalists, Offshore Engineers for their reference, research and developmental activities in marine related studies /

applications. The buoy data is also available to the global community through Global Telecommunication System (GTS).

In order to operate and maintain such large observational platforms, a dedicated vessel is essential. First time a full-fledged research vessel has been built in India at Hindustan Shipyard Ltd., Vizag particularly to cater to the needs of various ocean platforms besides supporting for conducting ocean research. The vessel was successfully launched on 03 November 2005 and the same was commissioned in May 2006 after conducting several sea trials. The vessel is capable of deployment of various ocean platforms both in coastal and offshore waters. In July 2007 the technology demonstration vassel Sagar Nidhi was successfully launched in water.

AUTONOMOUS INSTITUTIONS UNDER THE EARLIER MINISTRY OF OCEAN DEPARTMENT

National Institute of Ocean Technology (NIOT) : National Institute of Ocean Technology (NIOT) at Chennai was established by the Department of Ocean Development (DOD), Govt. of India as an autonomous institute, in association with IIT-Madras, Chennai during November 1993 with the main aim of developing and promoting technology for specific purposes in ocean related areas. The multifarious activities of NIOT are carried out as in-house technology development programmes and field demonstration projects. The NIOT is presently involved in a major way in demonstration of LTTD Desalination technology and deep sea mining systems. NIOT is also implementing two major operational programmes on behalf on DOD, namely, the National Data Buoy Programme and operation of Research Vessels for pollution monitoring. The other important areas of activities of NIOT include Coastal and Environmental Engineering, Technologies for lobster fattening and crab fattening and marine instrumentation.

National Centre for Antarctic and Ocean Research (NCAOR) : In order to consolidate the gains accrued from the Antarctic expeditions and to stimulate the research in the frontier area of polar science, the National Centre for Antarctic and Ocean Research (NCAOR), Vasco, Goa (formerly Antarctic Study Centre), has been established as an autonomous society of the Department of Ocean Development with effect from 25 May 1998. The mandate of the NCAOR is to plan, promote, co-ordinate and execute polar science and logistic activities of the country in order to ensure a perceptible and influential presence of India in Antarctica and uphold our interests in the global framework of nations in the southern continent and the surrounding oceans. A state-of-the-art ice core laboratory is set up at the Centre for archival, preservation and analysis of the ice cores for paleoclimatic research. In addition, NCAOR is also dealing with the prestigious project on Delineation of Outer Limits of Continental Shelf, Geophysical Study of Laxmi Basin and management of Oceanographic Research Vessel Sagar Kanya apart from Southern Ocean Oceanography, Polar Remote Sensing and Climate Change Research.

Indian National Centre for Indian Ocean Information Services (INCOIS) :

The Indian National Centre for Ocean Information Services (INCOIS) was set up at Hyderabad in February 1999 as an autonomous body of the Department for generation and dissemination of user-oriented data products, on operational basis. INCOIS is responsible for (i) providing potential fishing zone advisory to all maritime states and islands of India, (ii) establishing state-of-the-art IT infrastructure for the

oceanic realm, (iii) implementing ARGO programme, Indian Ocean Dynamics and Modelling Project (INDOMOD), Satellite Coastal and Oceanographic Research Project (SATCORE) and Ocean Observing Systems (such as Drifting Buoys; Current Meter Arrays and Expendable Bathythermograph and Sea Truth Validation Campaigns) with active participation from a network of premier institutions, (iv) managing a network of Marine Data Centres, and (v) establishing an Ocean Information Bank and web based services.

OCEAN AWARENESS PROGRAMMES

The Ministry of Earth Sciences is engaged in creating awareness among sea users for exploration, exploitation, preservation and conservation of Ocean resources; and to educate them with recent investigations of Ocean and Atmospheric Science and developments in technology that can deliver products for the benefit of social communities who mainly depend on sea for their livelihood. The Research and Developmental results on substantial utilisation of ocean resources along with the latest information on preservation of estuarine ecosystem are to be propagated among the sea users through some mechanism, viz seminars, symposia, exhibitions, awarding medals, etc, for conserving the ocean resources. Other propagation media is by displays, special publications such as brochures, books etc., screening suitable films on underwater resources in schools, colleges, News papers and magazines, Television media etc; through Lectures, Debates, Drawing / Painting competitions, etc. in public places; by organising workshops in their local languages. Awareness is also aimed to attract talent through various attractions and grooming them with better facilities to enable them to concentrate more. The topics to be covered are the Marine Living and Non-Living Resources, Coastal Erosion and Ocean processes, Polar Science (Antarctica) and their related activities, Socially related activities including preservation of Ocean Resources and safety of fishermen at Sea, Marine Pollution, etc. The Ministry has so far been participating in National and International Exhibitions including Trade Fairs and supporting the Ocean related courses, seminars, symposia, conferences, workshops, etc. The Ministry also has been spreading the message through the celebrations of its Foundation Day held each year on the 27th July when awards instituted in Ocean and Atmospheric Sciences carrying a citation and prize money of Rs.1 lakh each are distributed.

METEOROLOGICAL SERVICES

Meteorological Services through Forecasting is an age old practice which in recent decades has assumed vital importance in management of disastrous phenomena and a plethora of activities that factor in meteorological information to raise productivity. The impact of meteorological services on society in general and on safety of life and property in particular is profound in terms of financial and social value.

Various premier organizations of the country are involved in this gigantic task. The overall focus and orientation of present and future activities are briefly provided below:

India Meteorological Department

A legacy of scientific achievements during the last 136 years and a demonstrated ability to reform and adapt puts the India Meteorological Department (IMD) on the leading front of scientific services in India. As a mature patriarch of the community

it has created space for basic meteorological research in the form of the Indian Institute of Tropical Meteorology, established in 1962 and the National Centre for Medium Range Forecasting in 1989, to specialize on medium range forecasting in the country. In more than symbolic terms the migration of the meteorological community from the Ministry of Science & Technology to the newly constituted Ministry of Earth Sciences (MoES) in July 2006 has established an independent identity for meteorology and a new role for related services in the country.

The international commitments of India embodied in a charter of understanding with the World Meteorological Organization, rest mainly in the conduct of observations, data dissemination and issuance of neighbourhood services in the capacity of a Regional Specialized Meteorological Centre for Tropical cyclones and a Regional Meteorological Training Centre for the RA II region. In addition, it participates in global and regional research programmes of the WMO.

The Observational infrastructure of IMD is its backbone. It has surface, upper air, Radar and satellite components comprising a mix of old and relatively recent systems. Coexistence of various technologies, though good for stand-alone applications, hampers compatibility required for integration. In addition to conventional meteorological observations IMD is also the only agency in the country which regularly monitors environmentally significant atmospheric composition over the last 4 decades.

IMD presently issues short-range forecasts (up to 2-3 days) in spatial scales of meteorological Subdivisions (numbering 36 in the country). A demand has now set in to assist local governments at District levels to combat weather anomalies. This need for higher spatial resolution would put a severe demand on forecasting capabilities because of low atmospheric predictability at smaller scales. One must therefore resort to a much higher volume of data assimilation in numerical modelling suitably aided by manual value addition - something that cannot be dispensed with at the current state-of-art. A major revamp in materials and methods would be inevitable. In this regard, a comprehensive modernization plan for IMD is envisaged in a couple of year's time. This includes networking amongst all the observation systems, integration of entire infrastructure and decision support system merging model output with synoptic reasoning, visualization and finally the dissemination of processed information in real time to various end users.

IMD has been practising numerical modelling for the last 30 years even with its limited computing facilities. It has the requisite personnel and traditions that lead to success of numerical weather prediction. The use of satellite data to supplement conventional observations is also on a healthy rise. Moreover, experience has been earned in operation of sophisticated systems like the digital Doppler Radar. Initial R&D has demonstrated the prospects of indigenous improvement of upper air sounding equipment. Further, with a system of interaction with Research and Specialized Centres also being put in place, the IMD stands out as an ideal candidate for a revamp that is now sought.

IMD has also the responsibility to monitor earthquakes also. To detect the exact location and parameters of a seismic event, data is required to be brought at a central location from a large number of sensors. Recent advancements in telecommunication and computing technology have given opportunity to reduce detection time and errors by a significant amount. Such opportunities need to be availed and a rapid decision support system should be put in place targeting the need for overall preparedness against natural calamities.

IMD publishes its quarterly journal MAUSAM, annual publications of Indian Astronomical Ephemeris, Rashtriya Panchang in 13 languages and Sunrise, Sunset, Moonrise and Moonset tables are brought out by the Positional Astronomy Centre, Kolkata.

IMD has been rendering the following national services with constant endeavour to improve them.

1. cyclone warning and severe weather warning are now more specific and accurate with newly acquired ability to diagnose the storm structure using Doppler Weather Radars installed at Chennai, Kolkata, Machhilipatnam, Vishakhapatnam and Sriharikota,
2. dissemination of cyclone warnings directly to the concerned areas received a boost with installation of 100 Digital Cyclone Warning Dissemination systems along the Andhra coast,
3. upgradation of meteorological capability at the airports.
4. a Mountain Meteorology Centre was established at Delhi to provide meteorological inputs to prediction of landslides, avalanches and flash floods,
5. capabilities in numerical weather prediction were improved by the induction of high resolution models,
6. short range prediction lead time was extended from 2 days to 3 days with an additional 2 day outlook by adopting a new forecasting approach wherein several model outputs are taken into consideration,
7. a new Long Range Prediction model has been developed. July rainfall is also given as an additional forecast product for helping Kharif crop sowing,
8. detection and response times considerably lowered by upgrading the seismic monitoring system
9. Earthquake Risk Evaluation Centre was established at Delhi for seismic microzonation.

It is realized that the new demands are in the nature of a quantum jump. Agricultural production, water resources management, disaster preparedness etc. are keenly seeking accurate meteorological information in their new system of operations. In this regard, an Integrated Agrometeorological Service with a five tier approach from the National level to district level is being put in place. Upgradation and modernization of the Airports is another area which is given a boost in the coming years with state-of-art technology. Subjects like Environment and Climate have also been taken on board because of their undeniable impacts on society.

National Centre for Medium Range Weather Forecasting (NCMRWF)

NCMRWF continues to be the only Centre in the country where an end-to-end Numerical Weather Prediction (NWP) system has been developed based on a global Atmospheric General Circulation Model which is run on real time since June 1994. This involves use of voluminous global data, their assimilation to provide initial conditions for running numerical global models through high end computing resources and generation of NWP products with special emphasis on location-specific output products. Continuous efforts to increase the reliability and scope of the forecasts are being made through increasing resolution of numerical models,

improving representation of physical processes in the model, optimizing use of satellite and other data in the assimilation, extensive verification and validation. For improving the location-specific Forecasts Dynamical / statistical downscaling techniques have been developed. In order to address the high impact weather systems the meso-scale analysis and forecast systems are also implemented in the Centre.

NCMRWF is envisaged to be the Centre of excellence in NWP in the coming years in the field of Weather and Climate Modelling. The developmental work in the NWP will focus on the following thrust areas, viz.

- Increase of temporal range and spatial resolution of NWP models.
- Further improving the accuracy, reliability, range, and scope of forecasts through:
  - Development of higher resolution global model with much improved physics, dynamics. Use of large member based(50-60 members) ensemble system as well as multi-model approach.
  - Development of advanced data assimilation system capable of utilizing direct satellite radiances, clouds and rain data.
  - Further improvement in meso-scale models and corresponding assimilation for dynamic downscaling focussing on high impact weather systems.
- Weather Modelling support for early warning system for weather-related disasters.
- Development of a coupled (ocean atmosphere land) modelling and assimilation system for improving monsoon prediction over various temporal scales.

Indian Institute of Tropical Meteorology (IITM)

Since its inception in 1962 as Institute of Tropical Meteorology (ITM) and its subsequent transformation into an autonomous institution as IITM in 1971 the Institute has been functioning as a national centre for basic and applied research in monsoon meteorology of the tropics in general with special reference to monsoon meteorology in India and neighbourhood. Its primary functions are to promote, guide and conduct research in the field of meteorology in all its aspects. The Institute has made significant contribution in the challenging areas of the Atmospheric Sciences like Weather Forecasting, Climatology, Hydrometeorology, Monsoon Variability, Climate Modelling, Cloud Physics, Weather Modification, Atmospheric Chemistry, Atmospheric Electricity, Instrumentation for the Observational Studies and Studies relating to Land Surface Processes. IITM provides its input to the India Meteorological Department for the national forecast of seasonal monsoon rainfall of the country.

The IITM has, from time to time, widened its objectives and scope of research activities to meet the critical challenges and the national needs for providing information relating to various aspects of atmosphere and the increasing concern among the Government and general public about a variety of environmental issues. One important national need is to have reliable extended range prediction of the monsoon and to establish India's stand on a variety of issues related to global warming and climate change. Thus, the main areas of research in the coming years taken up by the Institute are :

- Development of a system for long range prediction of seasonal mean monsoon and extended range prediction of active/break spells. It would involve assessing component models, coupling strategy, assessment of bias of the coupled model, data assimilation, development of forecast strategy etc.
- Estimation of monsoon climate under different climate change scenarios through downscaling using a regional climate model and quantification of uncertainty in estimation of monsoon climate.
- Improve formulation of convection in the models through focused observational and modelling efforts. This involves simultaneous observations of cloud processes and environment involving a cloud and weather radar system, GPS radiosonde, a network of lightning discharge etc.
- Enhanced activities on Aerosol monitoring, modelling and other observational studies along with development of instrumentation and Cloud modification experimentation are also part of the future activities of the Institute.
- To address the science issues pertaining to climate change, focused research activities are proposed at the Institute. An establishment of a Centre for Climate Research is also envisaged.

BIOTECHNOLOGY

Biotechnology is a set of rapidly emerging and far-reaching new technologies with great promise in areas of sustainable food production, nutrition security, health care and environmental sustainability. Our vision is to use powerful tools of biotechnology to help convert the country's diverse biological resources into useful products and processes that are accessible to its masses for economic development and employment generation. Biotechnology is globally recognized as a rapidly emerging, complex and far reaching new technology. Biotechnology can, over the next two decades, deliver the next wave of technological change that can be as radical and pervasive as that brought about by IT. The recent and continuing advances in life sciences clearly unfold a scenario energized and driven by the new tools of biotechnology. The convergence of advances in biology-genomics, proteomics, bioinformatics and information technologies is driving the emergence of a new bioeconomy. During the last five years, biotechnology industry has been growing at a rate of 40% and in 2005-06 exceeded US$ 1.5 billion in turnover. Though the growth was achieved mainly through leadership in biogenerics and contract manufacturing, research leading to innovative product development did not lag behind. The social impact of such growth is evident from India assuming a dominant place in vaccine exports, diagnostics, transgenics (BtCotton) and a number of biotherapeutics. There is a projection of an annual turnover of US $ 10 billion for India by 2010 and a speculated about 25% annual growth rate between 2010 and 2015. During the year 2006-07, the impetus has been on programmes of national relevance with special emphasis on strengthening of infrastructure, creation of centres of excellence, capacity building and developing mission mode programmes and public-private partnerships. Over 450 R&D projects have been supported during the year with approximately 200 universities and research laboratories being provided the necessary support in terms of both capacity building and infrastructure strengthening. In the area of health care, new vaccines and diagnostics have been indigenously developed and are under clinical trials. A major initiative has been taken to develop stem cell research in the country and 6 centres have received programme support. A road map has been formulated and city clusters established

to forge interdisciplinary collaboration, crucial to this sector. Cutting edge research in areas of tissue engineering, bio-medical devices, biomaterials, nano-biotechnology and RNAI is begin supported. A special initiative for devices and formulation required for a national programme on maternal, neonatal and child health has been initiated. In the area of agriculture biotechnology the focus is on nutritional enhancement, increased productivity and development of crops resistant to biotec and abiotic stresses. Establishing Centres of Excellence has received special attention during the current year to achieve re-engineering of certain institutes for greater innovation and focus. The societal development programme has received special attention and benefited more than 20,000 SC / ST people, women and rural population during the year. The efforts were focused to create circumstances for increasing access of common people to new technologies and products and promoting the mass use of these technologies for health care, nutritional security, employment generation and environmental well being. Life science and biotechnology sector is characterized by dynamic changes in flow of new idea and conception and development of new tools for research. Rapid responses are required to meet these challenges. A number of new initiatives have been taken up during the year to achieve this goal, which include increased number of Ph.D. post-docs including overseas fellowships, rapid grants for young investigators, innovation fellowships etc. A major success during the current year has been the launch of public / private partnership scheme-Small Business Innovation Research Initiative (SBIRI), which promotes highly innovative early stage, pre proof-of-concept and late stage development research emphasizing on important national needs. During the year, the Autonomous Institutes have concentrated on technology and product development besides basic science. New International Collaborations have been forged with Denmark, Netherlands, US, Finland, UK, etc. Several of these are dedicated to tailored agricultural and vaccine and diagnostics technologies for regional / local needs.

HUMAN RESOURCE DEVELOPMENT

An integrated programme of human resource development in biotechnology is being implemented to generate trained manpower and upgrade skills of existing manpower for overall development of Biotechnology in the country. Presently, 63 Post Graduate teaching programmes in various areas of biotechnology namely General Biotechnology, Agricultural Biotechnology, Animal Sciences, Medical Sciences, Marine Sciences, Neurosciences, Industrial Biotechnology, Molecular and Human Genetics, Environmental Biotechnology and Pharmaceutical Biotechnology. M. Tech Biochemical Engineering and Biotechnology, in addition to seven Post Graduate diploma in bio-safety & regulations, animal cell culture etc. are being supported all over the country. Around 1000 students are admitted for these courses through an All India Common Entrance Examination. There is a provision to give industrial exposure to PG students for six months with an aim to bridge gap between skill sets of students produced by universities and requirements of the industry, under Biotech Industrial Training Programme (BITP).

The Department started JRF programme from 2004. 100 JRFs are selected through Biotechnology Eligibility Test (BET) conducted by University of Pune and fellowships are provided initially for a period of 3 years which may be extended up to five years. The programme is also being extended to students with Medical and Engineering background.

Post Doctoral Fellowship (PDFs) are given to 100 fellows each year and selection is done by IISc. Bangalore.

There is provision for upgrading skills of mid-career scientists, faculty involved in undergraduate and post graduate teaching by participation in short term training courses in leading institutions in the country and specialized training in overseas laboratories.

BIOTECH FACILITIES AND PROGRAMME SUPPORT

A programme to augment and strengthen institutional research capacity in area of biotechnology through support for establishment of Centres of Excellence continued, Six Centres of Excellence have been supported so far in the areas of genetics and genomics of silkmoths; co-ordinated research on tuberculosis, design of novel inhibitors against infectious disease agents, high-throughput allele determination for molecular breeding of crops and for developing high throughput molecular approaches for rice breeding. In addition, eleven proposals have been supported so far in Programme Support mode in the areas of therapeutic proteins, novel yeasts, abiotic and biotic stress tolerance in crop plants; cancer biology and therapeutics, nutrition genomics, human genetic disorders, micronutrient deficiencies, immunotherapy of cancer and leishmaniasis, translational research on transgenic rice and diagnositics for neglected infectious diseases.

AGRICULTURAL BIOTECHNOLOGY-CROPS

In a project to identify, map and transfer desirable alleles at QTLs for yield and yield components and stability and also to generate QTL bear isogenic lines of rice, and agronomic evaluation of BC2F4 Near Isogenic Introgressions lines (NIILs) as many as 200 BC2F5 progenies were evaluated for the second consecutive year during summer 2006 in multi-location trials. A new triticate line involving Himalayan rye and indigenous wheat genotypes has been synthesized to be further utilized as a diverse source for obtaining certain important wheat-rye translocations. In project on functional genomics of rice aiming at discovery and functional validation of genes, novel genes conferring bacterial blight (BLB) resistance have been discovered in accessions of wild species like O. longistarminata. O. nivara, O. glaberrima and O. barthii; land race accession Ac32753 and a few mutant lines of IR64. Gall midge resistance genes Gm 1 and Gm4 are being fine mapped to within 10cM of 2 MB region of the genome. In the network project on programme on development of Salinity and dehydration stress tolerance in rice, a gene encoding fructose 1, 6 bisphosphate was cloned to full length from Portresia (PCFR) and this enzyme was found to be active in the presence of NaCl. In the project on multi-site Evaluation of Transgenic Mustard (DMH-11) based on barnase-barstar system, the National Research Centre of Rapeseed-Mustard, Bharatpur conducted these trials along with four checks, viz. CMS based hybrid (DMH-1), National Checks (Varuna and Kranti) and a zonal check, at 10 locations during the year 2006. It was observed that higher yield of DMH-11 over the best check variety was recorded in 6 out of 9 locations. In the project on development of Transgenics Cotton for Resistance to Insect Pests, around 300 independent transgenics lines in cotton (Coker 310-FR) carrying the cry 1Ac gene for attaining resistance to Helicoverpa armigera developed. In most of the transgenics the cry1Ac gene is under the control of the double enhancer CaMV

35S promoter. Improvements have also been made in the transformation protocol of cotton which allows the use of Imidazolinone as a selection agent instead of kanamycin by using a double mutant acetolactate synthase gene as marker.

BIOFERTILISERS

With growing environmental concerns, the sole dependance on chemical inputs-based agriculture is being replaced by integrated approach involving conjunctive use of both organic and inorganic sources. In this context, biofertilizers have been well accepted as an economical, cost effective, renewable and safe organic source of plant nutrients to sustain crop productivity. Moreover, with recent focus on organic/bio-dynamic farming, the demand of biofertilizers is likely to grow at a much faster rate than before. At this juncture, we must realize that microbial inoculants are 'ecological inputs', whose effects are 'subtle and not dramatic' like chemical inputs. Hence, inoculation with good quality inoculants is a must and should be treated as an insurance against failure of nodulation. The shelf life both in the store and transit needs to be improved with due consideration to various 'abiotic' stresses. The quality-oriented production and marketing network will certainly make biofertilizers a viable enterprise for ultimate customer satisfaction. Keeping these in view, programmes on development of liquid biofertilizers and biofertilizers-based Integrated Nutrient management packages for plantation crops and medicinal plants have been generated. In addition biofertilizers strains developed through transgenosis will be evaluated in contained conditions.

BIOPESTICIDES AND CROP MANAGEMENT

The programme is directed towards the management of pests, diseases and weeds of economically important crops as well as development of commercially viable mass production technologies. A number of potent and cost effective methods of biological pest control were successfully developed. Formulations were prepared and tested successfully against viral and fungal infections of various crops. Genetic improvement of various species of entomopathogenic nematodes for enhanced efficacy and tolerance to environment, e.g. temperature etc. was achieved and found to be effective against insect pest of pigeon pea, rice stem borer, gram pod borer, cardamom root grub, sucking pests of cotton etc. Conservation and augmentation of two predators, viz. Dipha aphidivora and Microuns igorotus was achieved, which suppressed sugarcane wooly aphid populations. Pheromones were found to be quite effective against various species of bollworm, viz. pomegranate fruit borer and sucking moths of sweet orange. Pheromones dispensers, suitable for Indian conditions were also developed. Insecticidal toxin genes of various plant species and various novel bacterial strains is being done to develop a potent biopesticides formulation. The multicentric programme on the management of Parthenium launch to control the weed and for its possible economic potential is progressing well. At the initiative of DBT, guidelines for registration of biopesticides have been simplified and streamlined. In order to promote and facilitate the commercialization of biopesticides, 10 biopesticides have been taken up for generation of toxicological data, both for primary cultures as well as for their formulations. A comprehensive website on "Bio-pesticides" has been developed which highlights the achievements made in major programmes supported by the Department on biological control of pests, disease and weeds.

NATIONAL BIORESOURCE DEVELOPMENT BOARD

Programmes under the Board continued in the area of Biodiversity Characterization and Inventorization, Bioprospecting, improvement and utilization of resources and Capacity Building. The Fourth Meeting of the Board Chaired by the Hon'ble Minister S&T and ES, Shri Kapil Sibal was held on 25th July 2006. The digitized inventory of the primary and secondary data of bioresources-(plant, animal, microbial and marine) "Jeeva Sampada" and the maps and atlas prepared under the project on Biodiversity characterization of the landscape using remote sensing tools for Central India, Eastern Ghats and Mangrove regions were released by the Hon'ble Minister. A web portal Indian Bioresource Information Network (IBIN) has also been launched as a single window access to spatial and non-spatial data. This unique effort is the first of its kind which overlays all spatial information with ground level species information, the address to providing details of the genetic level studies being conducted. IBIN site was also launched by the Hon'ble Minister. Study on Mapping and Quantitative Assessment of Plant Resources continued for Eastern Himalayan Region, Western Ghats and Eastern Ghats. The country's first Butterfly Park at Bannerghatta Biological Park, Bangalore was inaugurated on 25th November 2006 by Hon'ble Minister Science & Technology and Earth Sciences, Shri Kapil Sibal. The Park houses more than 2000 butterflies at any given time representing 42 species. The uniqueness lies in the research activities continuing specially for rearing technologies, DNA Barcoding etc.

Projects have been supported for prospecting of novel genes, molecules, enzymes etc. from plants, microbes, fungi, and lichens for production of potential products of industrial importance. Novel genes / promoters, transcription factors are also being identified so as to develop transgenics for biotic / abiotic stress and understand different metabolic engineering pathway(s) operative in a system. A biofertilizer formulation based on novel salt tolerant nitrogen fixing and phosphate solubilizing strains of bacteria was developed and transferred to the industry.

A major new initiative during the year has been the launch of a Network programme on "Zingibers" and "Honey bee resources". Under the Zingiber network, programmes have been supported on biochemical and molecular characterization in relation to commercially useful traits, prospecting for selected secondary metabolites and domestication of some underutilized species of ornamental value. Under the Tea Research Network, a major new initiative has been taken on generation and analysis of Expressed Sequence Tag (EST) and also integrated genetic linkage map and marker assisted selection. A network programme has been launched for the Indian Coffee Genome Research under which CDNA libraries and ESTs are being developed. Under the Sugarcane Genomics a major achievement has been the development of PCR based diagnostic kits for red rot and smut diseases which is presently undergoing validation. Under the Bamboo Demonstration programme nearly 380-ha has been planted with tissue culture material. In addition R&D programmes have also been supported for developing and standardizing tissue culture protocols for other priority bamboo species.

Under the Capacity Building Programmes, during this year 21 Vacation training programmes were organized in different parts of the country benefiting about 600 children on sustainable utilization of bioresources. A Bioresources Nature's trail has been established at Kerala Forest Research Institute (KFRI) sub-centre at Nilambur in an area of 5ha.

MEDICINAL AND AROMATIC PLANTS

Four gene banks have been further strengthened with respect to collection, conservation and characterization of more number of germplasm accessions. A rapid and highly reproducible protocol for in vitro propagation of Picrorhiza scrophulariflora has been developed. High yielding lines of Nothapodytes nimmoniana with more than 1% camplothecin were identified from Western Ghats. Evaluation of the performance of elite tissue culture plantlets vis-a-vis stem cuttings of vanilla (Vanilla planifolia) in farmers' field over an area of 20 ha in Tripura state has been initiated. Cell-cultures of Commiphora wightii were grown in 2 litre stirred tank and 6-litre airlift bioreactor for guggulsterone production. A network project on development of standardized herbal product for bovine mastitis has been initiated. Purified pectic polysaccharide from Aegle marmelos have shown significant in vivo anti-leishmanial activity. Root extract of clitorea ternatea and taraxerol showed significant inhibition of acetyl cholinesterase activity and cognitive enhancing property. RAPD and minisatellite profiles of the sandalwood (Santalum album) populations of the southern regions of India have been generated. Work on cloning and characterization of regulatory elements of genes involved in picrosides biosynthesis in Picrorhiza kurrooa has been initiated. The full length 4, 11-diene synthase gene involved in sesquiterpene biosynthesis regulation in Artemisia annua has been cloned. Four genes of isoquinoline alkaloid biosynthetic pathway in Papaver somniferum have also been cloned.

PLANT BIOTECHNOLOGY

Support continued during the year for research and development projects on forestry, horticulture and plantation crops. The thrust of the activities was on plant tissue culture for mass multiplication of desired planting material, use of molecular markets for characterization of genetic diversity and superior accessions with reference to identified desirable traits, molecular biology tools for production of improved varieties through transgenic and molecular breeding approaches. The population genetic structure and diversity in Himalayan pines is also being analysed. Molecular tools were also used for genome evaluation and characterization. Projects in the area of horticulture crops focused mainly on production of disease free quality planting material, improvement of crops, with specific reference to extended shelf-life and genetic characterization studies. A brainstorming session was organized on improvement of forest based resources including both timber and non-timber-through biotechnological interventions and programmes are being developed for pinus and Eucalyptus. Potato, onion, brinjal and okra have been identified and programmes have been supported. Public Private partnership model is also being explored. Demonstration projects were supported to programmes under which protocols have been developed. Under the National Mission on bamboo, demonstration programmes have been supported in different states with a target to complete 1000 ha by next year. Project to study the signal transaction cascade events for both biotic and abiotic stress, hormones, light, etc. were supported. An International Solanaceae Genome initiative was launched. Both structural and functional genomics studies are being supported. Public Private model has been worked out and projects in the area of Biofuels are being supported to the industry.

ANIMAL BIOTECHNOLOGY

Efforts continued for the improvement of animal productivity, development of newer animal vaccines and diagnostics, molecular characterization of indigenous breeds

of livestock and "development of animal by-products. New programmes were initiated in the area of animal nutrition and development of newer animal vaccines. Standards were developed for estimation of mycotoxins in animal feed and distributed to various laboratories for routine analysis. A novel and potent anthrax vaccine which includes mutants of legal factor and edema factor was developed which provides better efficacy in vivo. An attenuated buffalo pox virus vaccine was developed and its field trial is underway. Vaccines for Rabies, Clostridium, Hemorrhagic septicaemia, Foot and Mouth disease. Bovine brucellosis, Bovine tuberculosis etc. are in various stages of development. Phage display technique was used as an alternative to hybridoma to produce mono specific antibodies against recombinant gag antigen of Bovine Immunodeficiency Virus. Diagnostics for paste des petits virus and buffalopox virus were developed and validated successfully. A RT-PCR assay was standardized for specific detection of Border disease virus and a nested PCR was also developed for differentiation of Border disease virus. Bovine viral diarrhoea virus 1 and 2. Multicentric programme on Buffalo Genomics was implemented with focus on identification of genes of economic importance. Structural and functional aspects of 3D scaffold of bovine origin for cardio mycocyte culture are being studied. Effects are also on to develop biomaterial of bovine origin for reconstruction surgery in animals.

AQUACULTURE & MARINE BIOTECHNOLOGY

Programme on biosurfactants, exploration of marine enzymes, bioactive molecules, reproductive biology and cell cycling, plasmid immune response, neuro-peptide synthesis, bioreactors, vaccine development for fish, bacteriophage therapy in improvement of shrimp larvae, oligonucleotide probe for monitoring vibrio counts in hatcheries, genetic characterization of marine organisms, organ development, cell lines from seabass, shrimp genomics and fish nutrition are being implemented Biosurfactants were screened using marine Acinetobacter genospecies. A prototype for raceway based shrimp production technology was utilized for nursery rearing of shrimp. Studies on occurrence of human pathogenic viruses in coastal marine waters were carried out. Marine cyanobacteria and chlorella species were studied for over expression of superoxide dismutase enzyme useful for bioremediation and salt tolerance. Bioactive molecules were explored for antibacterial, antiviral and anticancer agents. Role of bacterial plasmid gene was studied in pathogenesis of Epizootic Ulcerative Syndrome and its virulence. Applications with the use of phytase were explored from yeast as an alternate fish feed supplement. Neuro-peptides synthesis was explored from Indian cone snails and conus peptide sequence was worked out. A bioreactor was under development for microbial based treatment system for seafood industrial discharge. Vaccine development for fish for Aeromonas showed promising leads. Bacteriophage therapy in improvement of shrimp larvae was pursued as an alternative to antibiotics in aquaculture. Oligonucleotide probe for monitoring vibrio counts in hatcheries were designed. Organ development and differentation were studied using perivitelline fluid of Indian Horse Shoe Crab. Development of cell lines from Seabass showed promising leads. Shrimp genomics was pursued with focus on expression of immune function associated proteins from shrimp.

SERIBIOTECNOLOGY

Screening of silkworm germplasm for baculovirus resistance in silkworm (Bomby mori) has resulted in identification of three each of bivoltine and multivoltine strains

under a network project. Microsatellite analysis carried out in muga silkworm (*Antheraea assama*) populations indicate genetic variability in hill populations as compared to plain area populations. A *Bombyx mori* gene that code for antiviral protein has been partially characterized. A collaborative project has been initiated on epidemiology, spatial and temporal dynamics of diseases of muga silkworm. Under the Indian initiative on International Consortium on Lepidopteran Genome Project, functional annotation of unique putative genes of muga silkworm has been carried out. A total of 67 mulberry accessions have been conserved *in vitro* and 238 accessions have been successfully cryopreserved. Field evaluation of mulberry trangenics (with HVA-1 gene) for abiotic stress tolerance has been initiated. A few epicuticular wax related gene fragments having homology with *Arabidopsis* have been cloned from mulberry. Under a network project, screening of mulberry germplasm for disease response to powder mildew, tukra and nematode has been completed. A new programme on biotechnology in tasar sericulture has been recently initiated in collaboration with Central Silk Board.

BASIC RESEARCH IN MODERN BIOLOGY

Fifty-Two R&D projects having fundamental questions were supported to provide new vistas to the knowledge required for understanding the intricacies involved in applied research. Research highlights include: promising results for improvement of the oral bio-availability of cyclosporine and reduction of nephrotoxicity associated with the commercial formulation at NIPER, Mohali; Studies carried out at Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, using an *in vitro* cell culture model to evaluate the response of adult rat cardiac fibroblasts to hypoxia; IISc Bangalore revealed that UdgB plays a significant role in mycobacteria; Scientists at IMTech., Chandigarh showed that *phoP* Promoter activity is negatively auto-regulated by PhoP through sequence-specific interaction(s) involving 3 direct repeat subunits with a 9-bp consensus binding sequence. Studies carried out at IISc, Bangalore indicated that both MBP and Pre MBP are more prone to aggregation under crowded conditions with preMBP showing a greater extent of aggregation; Scientists at School of Life Sciences, JNU studied delineation methods to explore the physiological role of SMARCAL 1; Scientist at IISc., Bangalore revealed that the stabilizing contacts in the folded conformations of glycodelins are different; Scientists at CDRI, Lucknow used NMR spectroscopy to solve structure of *Mycobacterium tuberculosis*, *Escherichia coli*, and *Homo sapiens* peptidyl-TRNA hydrolase. A structural model based on *E. coli* Pth crystal structure, was generated; Crystallographic analysis of PfFbZ of *Plasmodium falciparum* carried out at IISc., Bangalore revealed new strategies in the design of novel antimalarials; Studies done at JNU, New Delhi suggested that *D. discoideum* under oxidative stress exhibits PARP mediated casepase independent paraptotic cell death; Oxidative stress induced DNA damage in ICSI being investigated at IIT Kharagpur revealed a positive correlation between ROS and sperm morphology and its DNA damage; Scientists at ICGEB, New Delhi characterized CIPK protein and showed that the protein contains autophosphorylation activity; Scientists at IIT. Kharagpur attempted to make folate-nanoparticle conjugate by grafting folic acid through some biocompatible nonpolymeric coupling agent and Scientists at University of Madras, Chennai are using biophysical techniques, chiefly X-ray crystallography, but also computer modelling, UV spectroscopy and gel mobility, to study the structures of DNA junctions, such as three way and four-way junctions, as well as unusual DNA packing modes that lead to novel microstructures.

MEDICAL BIOTECHNOLOGY

Concerted efforts have been made towards development of vaccines and diagnostics for the major infectious and non-infectious diseases specially in the areas of tuberculosis, avian influenza, Chikungunya, rotavirus, typhoid, malaria and HPV. New DBT-ICMR collaborative efforts has been initiated on HIV / AIDs and Microbicides research. About 20 projects have been implemented under this joint effort. Brain storming sessions were organized on future R&D efforts on avian influenza, Chikungunya and other infectious diseases. Emphasis was also laid on setting up virus research network projects. Typhoid vaccine development technology was transferred to an industry for further cGMP grade production, pre-clinical and clinical studies. A rapid diagnostics test system for filariasis (Signal MF) developed by Anna University, Chennai has been commercially launched. More than 100 new projects have been recommended for support in various infectious and chronic diseases areas. Efforts have been initiated to study molecular evolution and for the development of cost effective and easily upscalable multivalent vaccine for avian influenza (H5N1). Leads obtained in various research are being persuaded for product / process developments. Studies on development of a lentivirus based high efficiency gene transfer vector has culminated towards development of indigenous gene transfer vector with novel features of versatile multiple cloning site with expended cloning capabilities. An agreement has been signed between DBT and IAVI to pursue the biomedical research programme towards vaccine development of HIV / AIDS, and collaborative programme Neutralizing Antibody Consortium is going to be initiated soon. Follow up actions have been initiated on the leads available towards development of newer diagnostic systems, better therapeutics, RNAI and newer vaccines.

STEM CELL

Stem cell biology is a promising and emerging field of the life sciences. The potential of stem cell technology to develop therapy for many untreatable diseases through cellular replacement or tissue engineering is widely recognized. Keeping in view its potential therapeutic applications, both basic and translational research are being promoted by the Department in various institutions, hospitals and the industry. Till date, more than 55 programmes have been identified and supported on various aspects of stem cell research. These include generation of human embryonic stem cell lines, differentiation of pancreatic progenitor cells to insulin secreting cells, isolation of multipotential adult progenitor cells from bone marrow and their clonal expansion, use of banana lectins for stem cell preservation, hematopoitic stem cells (HSC) for haplo-identical HSC transplantation, use of limbal stem cells for ocular surface disorders, isolation and characterization of mesenchymal and liver stem cells, in vitro differentiation of human embryonic stem cells to neural and non-neural lineages, cardiac stem cells, embryonic stem cells etc.

Disease specific brainstorming sessions have been organized in the area of cardiac, stroke, limb ischemia and orthopaedic to explore the potential applications of stem cells in these areas. "CMC-DBT Centre for Stem Cell Research" has been established at CMC, Vellore to carry out basic and translational research. Multi-centric clinical study has been implemented on acute myocardial infarction and pilot study has been initiated on acute ischaemic stroke to determine safety and

efficacy of bone marrow mononuclear cells. Stem cell research facilities including clean rooms to handle stem cells have been created at PGIMER, Chandigarh, SGPGIMS, Lucknow, KEM Mumbai and LVPEI, Hyderabad. A training centre to provide training for embryonic and adult stem cells has been supported jointly at NCBS & JNCSAR, Bangalore. Current Good Manufacturing Practices (cGMP) workshop / training course was also organized. A number of scientists and clinicians were invited to participate in the training course.

Currently the challenges in this area include availability of human resource of desired expertise; adequate infrastructure; interdisciplinary network of researchers and clinicians for themebased research; appropriate regulatory mechanisms; well defined basic research leading to clinical / translational research, focused centres and institutions.

In order to formulate road map in the area of stem cell research, a series of disease specific meetings were organized. Based on the consensus, road map for stem cell research has been categorized into basic research, translational research; human resource development; creation of infrastructure facilities; establishment of Centre of Excellence, institutions, creation of basic research units in medical institutions, good animal models for the diseases, etc.

The Department of Biotechnology under Ministry of Science and Technology and Indian Council of Medical Research have jointly formulated draft guidelines for stem cell research. The guidelines are currently being placed for public debate.

BIOENGINEERING

Bioengineering has been identified as a potential area of research by the Department. In order to identify priority areas, create road map, strengthen R&D activities and infrastructure for bioengineering research in the country, the Department organized a number of brainstorming meetings. The key areas identified are: tissue engineering, biomaterials for therapeutics, medical devices, bioinstrumentation and biosensors. A number of workshops were organized in the identified areas. Brainstorming meetings were also organized on "Devices and equipment for maternal, new born and child health care" and "Indigenous production of surfactants for the treatment of premature babies". It was felt tht there is a need to initiate mission mode programmes at institutions having adequate facilities in collaboration with the industry; to strengthen R&D activities for the development of biomaterials especially for drug delivery, cellular / molecular imaging technology; disposable biosensors at low cost for rapid diagnosis of diseases, MEMS biosensor using multi-parameter approach; fabrication of medical devices and bio-instruments, development of implants, etc. As an outcome, several network groups of clinicians and basic researchers have been formed. Multicentric projects have been generated and implemented in the key areas of bioengineering. A separate task force has been constituted to consider projects in this area.

There is an enhanced awareness among the scientists, clinicians and industry in the country about bioengineering and product development. Efforts have been made to form network of academia, clinicians and industry in this area so that all stakeholders are associated in all stages of development, namely research, product development, technology transfer and commericialization. Product development, however, continues to remain a major challenge.

HUMAN GENETICS AND GENOME ANALYSIS

The Human Genetics & Genome Analysis programe which is under implementation since 1990-91 has established major infrastructure to pursue post genomic research activities in the country and also to keep pace with international efforts to exploit the available human, animal and microbial genomics available in public domain. A total of 21 genetic diagnosis-cum-counselling units established since 1991-92 provide continuous patients services in the country to affected families to reduce common genetic disorder / disease burden. So far more than one lakh families got benefited from these units and saved foreign exchange by providing diagnostic services in the country. In order to develop trained manpower in the area, the Government established four training centres (CMC, Vellore, AIIMS, New Delhi, IIH, Mumbai, and SGPGIMS, Lucknow) to train clinician scientists and technicians working at various medical colleges / institutions.

Several projects in the area of human genetics, human genome diversity, functional, structural, microbial, biocomputing, pharmacogenomics, and clinical proteomics were implemented involving a large number of clinicians, molecular geneticists and anthropologists. A strategy plan / roadmap document for the 11th Plan was prepared to initiate major programmes in human genetics and genomic network projects including genetic education in the country.

Several projects / programmes have been generated through brainstorming session in the area of clinical proteomics, pharmacogenomics and RNAi and supported many projects during the period.

ENVIRONMENTAL BIOTECHNOLOGY

Environmental Biotechnology Division, Department of Biotechnology has organized four Brainstorming Sessions on Environmental Metagemomics at New Delhi, Environmental Biotechnology at Nagpur, Biodiversity Conservation at Shillong and Thiruvananthapuram for identification of the thrust areas to the considered for research in the XIth Five Year Plan as well as for generation of focused, multi institutional network projects wherever it is required. Efforts are being made to provide the biotechnological solutions to the industries for abatement of pollutions with value added products from waste and conservation of endangered, threatened plant / animal species. A joint programme with NTPC is planned to formulate programme on carbon sequestration using biotechnological tools. R&D leads in some of the projects like Hydrogen (bio energy) from waste, industrial waste water treatment of highly polluting industries like Petroleum installations / refineries, pulp and paper industries, textile / dye industries and poultry waste are being taken up for joint ventures with user industries for demonstration of the technologies developed at laboratory scale. Support to R&D projects on industrial effluent treatment, restoration of degraded ecosystems, bioremediation of polluted sites, conservation and characterization of biodiversity using molecular tools is continuing.

MISSION MODE PROGRAMME ON BIOFUELS AND BIOENERGY

The Department of Biotechnology has launched a mission programme on biofuel from biomass. The thrust is on developing ethanol using lingocellulosie waste as a raw material, identifying recombinant microbial strains for enhanced ethanol recovery, producing high quality raw material for biodiesel production and developing enzymatic transesterfication process for conversion of oil to Biodiesel.

Under a micromission on production of quality planting material of Jatropha curcas, for the first time a systematic scientific survey, characterization and collection of superior accessions from across the country has been taken up. More than 100 accessions have been collected and characterized. Nurseries have been established at 12 locations to provide quality planting material.

Programme has also been initiated on using Lignocellulosic materials as they are cheap renewable resources, available in large quantities in our country and would sustain the supply of raw material for ethanol production. The economic viability of the process depends on efficient conversion of cellulose and hemicellulose to soluble sugars, which can be achieved by bringing down the cost of existing enzyme production by 2.0 fold. Under the Bioethanol programme, recombinant microorganisms have been identified, which are thermo tolerant and help in enhanced ethanol recovery, enzymatic pretreatment processes for lignocellulosic degradation are also going on. Efforts are continuing for scale-up of these technologies to make them commercially viable.

Under micromission programme more than 1000 superior accessions of Jatropha have been identified and 820 samples have been analysed for oil content and free fatty acids. Besides, germplasm characterization has also been taken up and 48 accessions have been analysed so far.

BIOTECHNOLOGY FOR SOCIETAL DEVELOPMENT

Demonstration and training programmes on proven and field-tested technologies were continued. The projects implemented could help in increasing the skills and income of SC/ST people, rural folk and women through product and process development and employment generation and improvement of their health status. More than 1,16,000 people have been benefited through around 135 ongoing projects on cultivation of aromatic and medicinal plants, mushroom, biological control of plant pests and diseases, solid waste management, vermiculture and vermicomposting, biofertilizers, aquaculture, guail farming and human health care etc. This year 20 new proposals were funded.

FOOD AND NUTRITION BIOTECHNOLOGY

During the year, the main emphasis was on development and use of nutraceuticals and probiotics for holistic health. The Department after indepth consultation with national and Canadian experts has worked out the logistics to establish a National Agri-Food Biotechnology Institute (NABI), and the Bioprocessing Unit (BPU) as autonomous institutions under the Department of Biotechnology (DBT), Ministry of Science & Technology. Both NABI and BPU are planned to come up along with an Agri-food Park designed to house start-up companies. All these three - NABI, BPU, and the Park - will form the Agri-food Cluster at Mohali, Punjab. Further, taking into account the demand of trained manpower in the area of food and nutritional sciences, the Department took the initiative for seeking letters of intent for creation and/or remodelling of Departments for an integrated Master's and Doctorate programme in Nutritional Science or Food Science & Technology.

LARGE CARDAMOM PRODUCT PLAN

Field evaluation of the performance of tissue culture-raised large cardamom vis-a-vis open pollinated seedlings continued on farmers' field in Uttarakhand state. About

34.45 ha area has been field planted during 2006 season using open-pollinated seedlings and tissue culture plantlets. Four training programmes for project personnel and farmers on cultivation and management of large cardamom have been organized.

MICROBIAL AND INDUSTRIAL BIOTECHNOLOGY

The main emphasis is to develop novel products and processes by perfection and scaling-up of the research leads and to evolve updated industrial knowledge for utilization by various biotech industries. Therefore need based scientific leads to generate and transform R&D results to products or processes utilizable by the industry and beneficial for the common man have been supported. The projects with research leads are prioritized and supported for further optimization and scale up of the technology which could ultimately become techno-economically feasible for industrial use. The technologies for production and application of various enzymes having industrial importance such as keratinase, pullulanases, cellulase, lactase, protease etc. have been developed. Emphasis has also been given on production of enzymes like hydrolase, L-asparaginase, phytase, chitinase etc. and medicinally important fungal products such as fumagillin, lovosatin and ezetimibe. The new projects relevant to health sector are focused on development of a novel vesicular drug delivery system for psoriasis and biochip based diagnostics for detection of genetic diseases. Projects on hyper production of dyes / pigments from selected lower fungi for application in textile dyeing industry, development of membrane bioreactor for the synthesis of structured lipids, preparation of an amperometric biosensor for determination of triglycerides, development of immunidiagnostic kit for the detection of Karnal bunt in wheat lots, production of wine from mango, and design and optimization of a circulating fluidized bed biomass gasifier have been implemented. Thrust areas have been identified for implementation as net work programmes / mission mode projects for implementation during the 11th Plan. Besides the identified thrust areas, proposals with novel / innovative ideas for product related discovery science and product development were invited from prospective investigators through a Call for Proposals. Involvement of industry is very important for product development related programmes and therefore, any project that is likely to lead to a "lead" or a "product" has been encouraged to have industry involvement from day one itself.

SMALL BUSINESS INNOVATION RESEARCH INITIATIVE (SBIRI) FOR PUBLIC PRIVATE PARTNERSHIP

The department initiated the scheme "Small Business Innovation Research Initiative (SBIRI)" in September, 2005 to bring biotech industry at the forefront of technological revolution. The programme aims to build and capture a leadership position for India among the topmost countries of the world in biotech sector. The SBIRI scheme operates in two phases. Under Phase-I highly innovative, early stage, pre-proof-of-concept research is supported, while under Phase-II, the funding is provided for late development and commercialization of innovative research leads. The proposals that address important national needs are given preference. This scheme marks a new phase in public-private-partnerships in a way that combines the strengths of the public sector with creativity and efficiency of the private sector. Effective linkages between the industry and academia are forged for up-scaling and validation of laboratory research to facilitiate commercialization. The SBIRI scheme reaches out

to entrepreneurs at the grass-root level and supports pre-proof-of-concept & innovative research leading to commercialization.

The scheme has been advertised five times since September, 2005. The department has received good response from the private industry. The proposals received are in the broad areas of health care; agriculture & allied areas; industrial product & process development; and environmental biotechnology. Under the health sector, the major thrust is on the development of therapeutics and drug designing while other areas like diagnostics, development of bioinstrumentation have utility in the medical sector. The R&D in other health related areas and clinical research are also covered by the private sector. In the agri-sector, the focus is on development of transgenics.

For close monitoring and review of the projects a two-tier mechanism is envisaged. At the first level, a Project Monitoring Committee (PMC) comprising of 2-3 experts would review the progress on a periodical basis.

The SBIRI initiative marks an important milestone and augurs well for the development of the Biotech Sector in India. The scheme has been well received and appreciated at different fora.

BIOSAFETY ISSUES

Under Biosafety programme main emphasis has been given to facilitate and implement biosafety procedures and guidelines for ensuring safety from the use of Genetically Modified Organisms (GMOs) and products thereof in research and application to the users as well as to the environment. The institutions and industries involved in recombinant DNA work are carrying out their activities with the approval from Institutional Biosafety Committees (IBSCs), Monitoring-cum-Evaluation Committee (MEC) and Review Committee on Genetic Manipulation (RCGM) and other institutional structures. The Department had reconstituted the Review Committee on Genetic Manipulation (RCGM) to monitor the safety related aspects in respect of ongoing r-DNA projects & activities involving Genetically Engineered Organisms / Hazardous organisms and controlled field experiments of transgenic crops, in compliance with the Rules-1989 of Environment (Protection) Act, 1986 (EPA-1986). The RCGM was actively involved in clearing and guiding public and private institutions in the development of transgenic crops and rDNA therapeutics. Apart from considering the applications submitted by various organizations involved in the rDNA technology, RCGM has taken several policy decisions such as standardization of protocol for conduct of multi-location field trials, data collection parameters, nomenclature of transgenic crop / gene / event, and new monitoring mechanism for Bt. cotton. In the area of recombinant pharma sector, the Department actively participated in finalization of report for the Task Force on "Recombinant Pharma Sector" constituted by the Ministry of Environment & Forests. The recommendations of the Department on protocols for different kind of r-DNA pharma products based on indigenous development and marketing, import and marketing, purified materials from Genetically Modified Organisms (GMOs) as products for commercialization and GMOs as products were included in the final report. The Department had actively provided inputs on rationalization of biosafety regulatory procedures on transgenic crops and recombinant DNA therapeutics to several committees set up by Government of India M / s Bitoech Consortium India Ltd. New Delhi has been supported by the Department to organize workshops on National Consultation on Biosafety aspects related to Genetically Modified

Organisms' to apprise the members of the IBSCs on biosafety Rules, Regulations & Procedures. The Department has also been organizing workshops, seminars and symposia on biosafety rules and regulations to increase the awareness among the research institutions working in the area of r-DNA technology. For making available transgenic crops and recombinant DNA therapeutics to the society at the earliest and at the same time not compromising on the safety of the products, the rationalized Biosafety guidelines and procedures were followed. A dedicated dynamic & interactive website on Biosafety reflecting National and International Guidelines, National Rules & Procedures with dynamic interaction with Institutional Biosafety Committees (IBSC) has been developed and launched. Another website on "Indian GMO Research Information System (IGMORIS)" aimed to provide information on research work going on in Indian laboratories, has also been launched. A handbook for members of IBSCs was prepared by the Department and distributed to all IBSCs. The Department had played an active role for the environmental release of four Bt. Cotton events expressing cry1Ac (Mon 531 event); cry1Ac & cry2Ab (Mon 15985 event) and GFM cry1A and cry1Ac (event No. 1) genes by different seed companies / industries based on the recommendations of Review Committee on Genetic Manipulation (RCGM) and Monitoring-cum-Evaluation Committee (MEC). About 320 IBSCs have been constituted so far at various public funded institutions, universities, private R&D institutions and industries. Keeping in view the recent Orders of the Hon. Supreme Court, the Department has been making efforts to ensure that the conditions laid out in the Orders are adhered to, while taking any decision on the applications for various research field trials.

BIOINFORMATICS

The BTIS net programme of this Department has today developed into an extensive nationwide Network covering over 120 institutions, spread geographically all over the country. The Network is engaged in providing support to Biotechnology research, creating human resources in Bioinformatics and carrying out research in different areas of Bioinformatics. Scientists of this network have published more than 1000 bioinformatics research papers in peer reviewed journals in last five years and helped in publishing more than 3000 research papers in biology and biotechnology. Fifty-two Bioinformatics facilities (BIF) were established towards introducing innovation in Biology Teaching through Bioinformatics (BTBI). These facilities will be a centralized resource of individual institutions to support bioinformatics tools and resources for the enhancement of learning capabilities in Biology and Biotechnology.

Initiated focused multi-institutional consortium projects in Bioinformatics to address specific problems through bioinformatics approach. Bioinformatics and experimental biology collaborative projects are being considered so as to improve the contribution of bioinformatics in wet lab biotechnology research. The Centres of Excellence in Bioinformatics such as JNU and University of Pune have upgraded their Diploma courses in bioinformatics to M. Tech in Computational and Systems Biology and M.Sc. in Bioinformatics, respectively. A national level Bioinformatics Certification (BINC) Examination was initiated this year to recognize the quality of human resources available in the country in Bioinformatics.

An unprecedented success made in organising the 5th International Conference on Bioinformatics (InCoB2006) in India. Over 1,000 registrants for this conference with 400 posters, 20 papers were published in BMC Bioinformatics with Impact

Factor 4.96 and others in J BioScience. The 2nd ASIAN-INDIA workshop on Bioinformatics was also conducted in this year for the benefit of 30 ASEAN country scientists including scientists from India.

BIOTECHNOLOGY PARKS AND INCUBATORS

The Biotech Parks and Bitoech Incubation Centres provide an excellent template for the promotion of Biotech start -up companies and the promotion of Public Private Partnership. The Biotechnology Park at Lucknow set up on 8 acres land provided by the Department of Science and Technology, Government of Uttar Pradesh is now operational and is emerging as a good model. A Bio-Business Block set up at the Biotech Park world be housing Business Support facilities, Bioinformatics Unit, Conference / Training Room and Cafeteria. The Tissue Culture Unit has the capacity to produce 10000 to 100000 plants / batch. The Biofertilizer unit has facilities for production of bacterial fertilizers. The central support facility will have the facilities for analysis and quality testing of the products. An ancillary service block has been built for air conditioning system, high and low-tension panel, diesel set generator and a boiler room. The extraction block will have system for extraction of phytochemical / lead molecules from high value medicinal plants. The diagnostic facility established by the Industry will manufacture and market the diagnostics kits. Distillation and vermicomposting units have been completed. One TPD oil expeller has been installed for extraction of oil from Jatropha seeds at the site of distillation unit.

The Biotech Park and incubator facility at Shapoorji Pallonji Bitoech Park, Genome Valley, Hyderabad has been mainly designed for development and scale-up of bio-processes and technologies. Current Good Manufacturing Practices (cGMP) compliance for Pilot plant facilities, required for quality manufacturing and for minimizing or eliminating contamination will be available. A Pre-Biotechnology Incubator (BTIC) Process Generator (PBPG), component of the BTIC was set up at IICT, Hyderabad to act as an intermediate and front-end facility to provide lab and bench scale process technologies for biotech processes. A Biotechnology Incubation Centre (BTIC) in Kerala is being established at Kalamassery, Ernakulum Dist., Kochi to promote small entrepreneurs and units for knowledge of traditional medicine, herbs and plant varieties, spices etc. This would help in modernizing production technologies, quality assurance or raw materials and products. The incubator facility would accelerate commercialization of new technologies, support new ventures in biotechnology and provide appropriate linkages to entrepreneurs. Initiatives are underway in Himachal Pradesh to set up a BIotech Park. The Biotech Park initiative at Bangalore, Karnataka is being pursued for the promotion of Public Private Partnership. The Biotech Park at Karnataka will be structured into three components viz. Institutional & Research & Development Block, Biotech Incubation Centre and Common Instrumentation Facility; and Biotechnology Industries Cluster comprising independent private industry units. The Karnataka Biotechnology and Information Technology Services (KBITS) is the implementing agency and they have identified a few Public Private Partners for the Biotech Park.

INTERNATIONAL COLLABORATION

International collaborations in biotechnology are an important vehicle for expanding the knowledge base and developing of expertise which would leverage the growth of research and development in the country. There is a renewed interest in

collaboration with India amongst the developed countries. Good progress has been made following the MoU which were signed with Denmark and Finland and joint projects have been funded. Joint projects have also been funded with The Biotechnology and Biological Sciences Research Council BBSRC, UK. In new collaborations the Department signed two memoranda with Agriculture and Agri-Food, Canada and the National Research Centre Canada respectively. The ongoing bilateral agreements and collaborations have also been significant, with joint projects being funded with Germany, Norway and USA. Bilateral interactions have been initiated with Sweden, Ukraine and EU. The multialteral collaboration including co-operation amongst SAARC countries were pursued.

AUTONOMOUS INSTITUTIONS AND PUBLIC SECTOR UNDERTAKINGS

NATIONAL INSTITUTE OF IMMUNOLOGY, NEW DELHI

The Institute continues to make inroads into basic research related to the immune system with a commitment that the knowledge gained would contribute to newer and more effective ways of addressing the health needs of the country. During the year more than 50 peer reviewed manuscripts and 5 reviews have been published. There is about 25% increase in the number of original peer-reviewed publications over the last year especially in high impact journals that include: Nature Immunology, Immunity, EMBO Journal, Journal of Clinical Cancer, Cell Death and Differentiation, Journal of Biological Chemistry and European Journal of Immunology etc. The Institute continued with the concept of 'end-to-end' research in the biosciences and have signed MoU with Astra Zeneca India. Bangalore, and Cadila Pharmaceuticals, Ahmedabad on a technology related to novel molecules that inhibit Mycobacterial Fad D proteins and can have the potential as anti-mycobacterial drugs.

NATIONAL CENTRE FOR CELL SCIENCE, PUNE

The Centre has emphasis on R&D activities in the areas of cell biology including stem cell biology, signal transduction, cancer biology, diabetes, infection and immunity and chromatin architecture and gene regulation. The national cell repository supplied 1154 cell lines to 128 scientific institutions in India. Training and teaching programmes were also conducted. In the cell biology research, for the first time a nuclear pore protein has been found to be associated with interphase microtubules. A protein molecule from perivitelline fluid of India horse shoe crab has shown cardiac promoting activity. In stem cell research, arachidonic acid omega 6) and its metabolites found to reduce appotosis in CD34+cells. The differentiation of mouse embryonic stem cells into dopaminergic neurons has been achieved. In diabetes research, chick pancreatic B islets have been found to be an excellent screening model for physiological and pharmacological studies. In cancer biology area, a distinctive nuclear-mitochondrial mutational profile and varying stem cell dynamics have been identified which seem to be associated with tumorigenesis. As a potential therapeutic anti-cholesterol agent, methgl-B-cycolodexterin in combination with other cytotoxic drugs towards reduction of drug dosage is being evaluated. Studies on signal transduction revealed that cox-2 is a potential agent for prostate tumor suppression. In infection and immunity studies, selenophosphate synthetase gene has been cloned and characterized. Successfully isolated and characterized dendritic cell types 1&2 Genome sequencing of poxviruses and

herpesvirus showed that members of these families encode structural homologs of human regulators of the complement activation to mask themselves against the hosts complement attack. Studies on HIV biology indicate that Hsp40 as a crucial player in Nef mediated enhancement of HIV gene expression and replication. Leads from chromatin architecture and gene regulation studies on HIV have advanced the knowledge on mechanism of global gene regulation. During the reporting period, 46 scientific papers were published in high impact factor journals and 7 patent applications have been filed.

CENTRE FOR DNA FINGERPRINTING AND DIAGNOSTICS (CDFD), HYDERABAD

The Centre for DNA Fingerprinting and Diagnostics (CDFD) is an autonomous organization funded by the Department of biotechnology, Ministry of Science and Technology, Government of India. CDFD has been providing services for DNA fingerprinting, diagnostics, new born screening and bioinformatics based modern high-technology DNA-based methods, of direct benefit to the public, as well as in performing fundamental research of international standards in frontier areas of biological science. CDFD is providing DNA fingerprinting services to various Government & Law Enforcement Agencies and signed MoUs with State / Central Frorensic Science laboratories to popularize this technology for the benefit of the society. There are presently fifteen groups working on diverse research areas related to genetics, molecular and cell biology, cancer biology, pathogen biology, HIV biology, Immunology, etc. CDFD also has a Sun Microsystem's Centre of Excellence in Medical Bioinformatics. Based on novel technology developed by the Centre, a new joint activity has been initiated this year at the CDFD as "APEDA-CDFD Centre for Basmati DNA Analysis" with funding through APEDA (Agricultural and Processed Food products Export Development Authority). The Centre will test and certify export consignments of basmati rice for their purity, and is expected to contribute in increasing the value and quality of such exports from the country. The major thrust areas of research in the Centre continue to be studies on infectious disease pathogens including M. tuberculosis, H. pylori, HIV, and HPV, silkmoth genetics and genomics, computational biology and bioinformatics; and fundamental studies on transcription and signal transduction. Transgenic silkworms have been created that are resistant to baculovirus, causative agent for destroying the worms, by using RNAi technology. Important results in K-Ras signaling pathways in cancer epithelial cells have been obtained and a novel and convenient tool for Human Papilloma Virus detection has also been developed.

NATIONAL BRAIN RESEARCH CENTRE (NBRC), MANESAR, HARYANA

The National Brain Research Centre was established to create a Centre of Excellence in Brain Research with state of art facility in the country to consolidate, network and undertake basic research of high caliber in neuroscience and also to generate highly trained human resources. The mandate of the centre is also to have established linkages with national and international organizations involved in neuroscience research. So far the centre through its networking centres established 47 neuroscience groups / institutions in the country to promote multi-disciplinary research and providing the facilities of a digital library. The Functional Magnetic Resonance Imaging (IMRI) facility of the centre was made operational on 29th September, 2006. As a deemed university, NBRC is continuing its M.Sc. Ph.D. programmes for research fellows.

The major areas that have been identified for research include computational neuroscience, system and cognitive neuroscience, stem cell research, developmental neurology and basic research towards understanding of neurological and psychiatric disorders.

NATIONAL INSTITUTE FOR PLANT GENOME RESEARCH (NCPGR), NEW DELHI

The National Institute for Plant Genome Research (NIPGR), New Delhi (previously a National Centre) is engaged in plant genomic research with focus on structural genomics and functional with application genomics. It is working on Genomics of certain crops and manipulation of genes / genomes to breed improved varieties of food and industrial crops such as Chickpea, Catharanthus, Potato, Tomato, Lathyrus, Rice, Sweet Potato and Cassava. Besides working on nutritional aspects, improvement in self-life of vegetables and fruits, development of resistance / tolerance against diseases and abiotic stresses, the Centre is actively engaged on programmes related to enhanced production of medicinal alkaloids from Catharanthus plant. The Institute is also making a significant contribution towards scientific manpower development in advanced areas of plant molecular biology, genomics and genetic transformation.

INSTITUTE OF BIORESOURCES AND SUSTAINABLE DEVELOPMENT, IMPHAL

The research programmes of the institute have continued towards bioresource development and their sustainable use through biotechnological interventions for the socio-economic growth of the North-East region. A digitized database of bioresources of North-East region has been further updated with an addition of 1,619 records from primary and secondary sources amounting to a total of 4085 records. Work on the database on micro-organisms with special reference to cyanobacteria available in Manipur has been initiated. A Distributed Information Sub-Centre (Sub-DIC) under the Bioinformatics Network has been set up at the institute. In vitro multiplication and hardening of tissue culture plantlets of Kaemferia galanga is in progress. Hybridization of two rare vandaceous orchids-Aerides vandarium and Vanda coerulea achieved. Genetic differentiation of tree bean (Parkia timoriana) cultivars grown in Manipur were analyzed. About 10 lakhs of spawn and 20,000 fingerlings of Osteobrama belangeri (Pengba)-an endemic high value fish wer supplied to the farmers. Three training programmes on the ue of tools and techniques for bioresource development and utilization were organized. Culturable seeds of Osteobrama belangeri (Pengba) were produced in a Training-cum-demonstration programme of the institute and about 10 lakh spawns and 20,000 fingerlings were distributed free of cost to selected fish farmers and entrepreneurs of Manipur as starting material for popularization of this fish in the region.

INSTITUTE OF LIFE SCIENCES, BHUBANESHWAR

Cutting edge technology in molecular biology continued to serve as a useful tool for acquiring insights into biology of the aging process, pathogenesis of chronic myeloid leukemia, infectious diseases such as cholera, Malraria and filariasis and in plant and environmental biotechnology. A septuplet PCR assay was developed for rapid identification of species-specific virulent and e-positive strains of V. cholera and one hundred strains of V. cholerae O1 wer tested to document the validity of assay. A multiplex PCR assay to detect a fluviatilis sibling species developed during

the course of the year will be used to understand feeding habits (Anthropophilic index) and sporozoite carrying capacity of these vectors. Studies on bio-prospecting were continued with a view to tapping the vast potential of thermopiles. A diverse group of bacteria belonging to the genera Thiomonas, Comamonas and Chromobacterium were isolated from previously unexplored hot springs. A chemolithoheterotrophic, thiosulfate oxidizing, gram negativebacterium (designated strain S10) was isolated and identified. 16S DNA sequence data and the total fatty acid analysis suggested it to be a new species of genus Thimonas for which the name Thiomonas bhubaneswarensis has been proposed.

During the year, three workshops on training was organized on DNA technologies, functional genomics and proteomics research and studies of abiotic stress responses and stress inducible genes. Ten publications have been brought out in November 2006 with an average impact factor of 3.02. Six additional non technical posts were also sanctioned during the year. The construction activities for the new research building, animal house and research scholar's hostel have been initiated and the contract awarded to M/s RITES Ltd.

PUBLIC SECTOR UNDERTAKINGS

There are two public sector undertakings i.e. Bharat Immunologicals & Biologicals Corporation Limited, (BIBCOL) and Indian Vaccines Corporation Limited (IVCOL). The BIBCOL located at Bulandshahar manufactures Oral Polio Vaccine being used in the National Immunization Programme. The IVCOL was established as a joint venture company. Efforts are being made to revive it with new products mix and financial pattern.

INTERNATIONAL CENTRE FOR GENETIC ENGINEERING AND BIOTECHNOLGOY (ICGEB), NEW DELHI

ICGEB continued its research efforts in identified areas of human health, agriculture and product development. A high through-put microtiter assay based on the heme detoxification pathway of Plasmodium has been developed for screening chemical combinatorial libraries and crude extracts of marine organisms. Several bioactive proteins from the secretome of insect pathogenic bacterium, Xanthomonas nematophila have been identified. A HCV test based on designer diagnostic HCV multi-epitope protein developed by the centre has been marketed in India. Three workshops were organized in the field of malaria, virology and plant transformation. An International symposium on tuberculosis research was also organized. Two patents have been feild.

25 Transport

A well-knit and co-ordinated system of transport plays an important role in the sustained economic growth of a country. The present transport system of the country comprises several modes of transport including rail, road, coastal shipping, air transport, etc. Transport has recorded a substantial growth over the years both in spread of network and in output of the system. The Ministry of Shipping, Road Transport and Highways is responsible for the formation and implementation of policies and programmes for the development of various modes of transport save the railways and the civil aviation.

RAILWAYS

The Railways in India provide the principal mode of transportation for freight and passengers. It brings together people from the farthest corners of the country and makes possible the conduct of business, sightseeing, pilgrimage and education. The Indian Railways have been a great integrating force during the last more than 150 years. It has bound the economic life of the country and helped in accelerating the development of industry and agriculture. From a very modest beginning in 1853, when the first train steamed off from Mumbai to Thane, a distance of 34 kilometres Indian Railways have grown into a vast network of 7,133 stations spread over a route length of 63,465 kilometres with a fleet of 8,025 locomotives, 44,090 passenger service vehicles, 5,990 other coaching vehicles and 2,07,176 wagons as on 31st March, 2006. The growth of Indian Railways in the 150 years of its existence is thus phenomenal. It has played a vital role in the economic, industrial and social development of the country. The network runs multigauge operations extending over 63,332 route kilometres. The gauge-wise route and track lengths of the system as on 31st March, 2006 are as under:

Gauge	Route Km	Running Track Km	Total Track Km
Broad Gauge (1,676 mm)	48,574	69,016	91,274
Metre Gauge (1,000 mm)	11,834	12,429	15,236
Narrow Gauge (762 mm and 610mm)	2,924	2,925	2,298
Total:	**63,332**	**84,370**	**1,09,808**

About 28 per cent of the route kilometre, 40 per cent of running track kilometre and 41 per cent of total track kilometre is electrified. The network is divided into 16 Zones. Divisions are the basic operating units. The 16 zones and their respective headquarters are given below:

Zonal Railways	Headquarters
Central	Mumbai CST
Eastern	Kolkata
Northern	New Delhi
North-Eastern	Gorakhpur
North-East Frontier	Maligaon (Guwahati)
Southern	Chennai
South Central	Secunderabad
South-Eastern	Kolkata
Western	Church Gate, Mumbai
East Central Railway	Hajipur
East Coast Railway	Bhubaneshwar
North Central Railway	Allahabad
North-Western Railway	Jaipur
South-East Central Railway	Bilaspur
South-Western Railway	Hubli
West Central Railway	Jabalpur

Indian Railways is now reorganized into 16 Zones. Two new Railway Zones viz. East Central Railway, Hajipur and North-Western Railway, Jaipur became functional on 1st October 2002. Five more new Zones viz. East Coast Railway, Bhubaneshwar, North Central Railway, Allahabad, South-East Central Railway, Bilaspur, South-Western Railway, Hubli and West Central Railway, Jabalpur became functional on 1st April, 2003. Along with the reorganisation of the Zones, eight new Railway Divisions, viz. Agra on North Central Railway, Ahemdabad on Western Railway, Guntur and Nanded on South Central Railway, Pune on Central Railway, Raipur on South-East Central Railway, Ranchi on South-Eastern Railway and Rangiya on North-East Frontier Railway became operational on Ist April, 2003.

Co-operation between public and Railway administration is secured through various committees including Zonal Railway Users' Consultative Committees and Divisional Railway Users' Consultative Committees. The rolling stock fleet of Indian Railways in services as on 31st March 2006 comprised 44 Steam, 4,793 diesel and 3,188 electric locomotives. Currently, the Railways are in the process of inducting new designs of fuel-efficient locomotives of higher horse power, high-speed coaches and modern bogies for freight traffic. Modern signalling like panel inter-locking, route relay inter-locking, centralized traffic control, automatic signalling and multi-aspect colour light signalling are being progressively introduced. The Indian Railways have made impressive progress regarding indigenous production of rolling stock and variety of other equipment over the years and is now self-sufficient in most of the items.

The main objectives of railways planning have been to develop the transport infrastructure to carry the projected quantum of traffic and meet the developmental needs of the economy. Since the inception of the planned era in 1950-51, Indian Railways have implemented nine five-year plans, apart from annual plans in some years. During the Plans, emphasis was laid on a comprehensive programme of system modernization. With capacity being stretched to the full, investment of cost-

effective technological changes become inescapable in order to meet the ever-increasing demand for rail transport. Along with the major thrust directed towards rehabilitation of assets, technological changes and upgradation of standards were initiated in important areas of tracks, locomotives, passenger coaches, wagon bogie designs, signaling and telecommunication. Progress of Railway traffic and inputs is shown in table 25.1

PUBLIC UNDERTAKINGS

There are ten public undertakings under the administrative control of the Ministry of Railways, viz. (i) Rail India Technical & Economic Services Limited (RITES); (ii) Indian Railway Construction (IRCON) International Limited; (iii) Indian Railway Finance Corporation Limited (IRFC); (iv) Container Corporation of India Limited (CONCOR); (v) Konkan Railway Corporation Limited (KRCL). (vi) Indian Railway Catering & Tourism Corporation Ltd. (IRCTC); (vii) Railtel Corporation of India Ltd.(Rail Tel); (viii) Mumbai Rail Vikas Nigam Ltd. (MRVNL); (ix) Rail Vikas Nigam Ltd. (RVNL); and(x) Dedicated Freight Corridor Corporation of India Limited (DFCCIL).

The Centre for Railway Information System (CRIS) was set up as a registered society to design and implement various railway computerization projects.

ROLLING STOCK

Over the years, Indian Railways has not only achieved self-sufficiency in production of rolling stock in the country but also supplied rolling stock to other countries and non-railway customers. In order to keep pace with the technology change, Indian Railways has entered into an agreement with M/s. General Motors, USA for transfer of technology for manufacture of 4000 HP, state-of-the-art AC-DC microprocessor controlled, fuel efficient locomotives at Diesel Locomotives Works (DLW), Varanasi and with M/s. ABB for manufacture of 6000 HP, 3 phase electric locomotives at Chittaranjan Locomotive Works (CLW), Chittaranjan. In 2006-2007, DLW achieved an all time high outturn of 186 locomotives including export of 5 locomotives to Sudan, 3 locomotives to Angola Railways and 13 locomotives to Non-Railway customers. CLW manufactured 150 electric locomotives during the year.

Indian Railways has started manufacturing of LHB designed high-speed light weight coaches at Rail Coach Factory (RCF), Kapurthala. During 2006-2007, RCF manufactured 1,319 coaches including 46 coaches for Non-Railway customers/ exports. Integral Coach Factory, (ICF), Perumbur, Chennai manufactured 1,251 coaches during 2006-2007 including 40 coaches for Non-Railway customers/exports.

Rail Wheel Factory (RWF), Bangalore manufactured 1,26,126 wheels, 58,259 axles and 40,500 wheel sets during 2006-2007.

RESEARCH & DEVELOPMENT

The Research, Design and Standards Organization (RDSO) at Lucknow is the R&D wing of Indian Railways. It functions as a consultant to the Indian Railways in technical matters. It also provides consultancy to other organizations connected with railway manufacture and design.

RAILWAY FINANCE

Since 1924-25, railway finances remain separated from general revenues. They have their own funds and accounts and the Railway Budget is presented separately to

Parliament. However, the Railways contribute to the general revenue a dividend on the capital invested. Quantum of contribution is reviewed periodically by a Parliamentary Convention Committee.

PASSENGER TRAFFIC

Passengers originating had risen from 1,284 million in 1950-51 to 5,725 million in 2005-2006 and passenger kilometre from 66.52 billion in 1950-51 to 616 billion in 2005-2006. Despite constraint of resources, the Railways have been able to cope with increasing demand of passenger traffic. Railways are the premier mode of passenger transport both for long distance and suburban traffic.

FREIGHT TRAFFIC

Rapid progress in industrial and agricultural sectors has generated a higher level of demand for rail transport, particularly in core sectors like coal, iron and steel, ores, petroleum products and essential commodities such as food grains, fertilizers, cement, sugar, salt, edible oils etc. Revenue freight traffic increased from 73.2 million tonnes in 1950-51 to 6,66,051 million tonnes in 2005-2006. Transport effort measured in terms of net tonne kilometres (NTkm) increased from 38 billion in 1950-51 to 439.6 billion in 2005-2006. Some of the measures taken for improvement are: (i) line capacity augmentation on certain critical sectors and modernization of signalling system; (ii) measures such as unit train operation for bulk commodities like coal; (iii) increase in roller-bearing equipped wagons; (iv) increase in trailing loads to 4,500 tonnes; (v) operation'UNI-GAUGE' on Indian Railways; (vi) strengthening the track structure by providing heavier and stronger rails and concrete sleepers; and (vii) production of prototype electric locomotive of 5000 HP for freight operation by Chittaranjan Locomotive Works.

ROADS

India has one of the largest road networks in the world, aggregating to about 33 lakh kilometres at present. The country's road network consists of National Highways, State Highways, major / other district roads and village/rural roads. Though the National Highways, which is the responsibility of the Central Government, has about 66,590 km (Annexure-I) length and comprises only 2 per cent of the total length of roads, carries over 40 per cent of the total traffic across the length and breadth of the country.

National Highways/Expressways	66590 km
State Highways	128000 km
Major and Other District Roads	470000 km
Rural Roads	2650000 km

The National Highways have further been classified depending upon the carriageway width of the Highway. Generally, a lane has a width of 3.75 m in case of single lane and 3.5 m per lane in case of multilane National Highways. The break-up of National Highways in terms of width is as under:

Single Lane	32%
Double/Intermediate Lane	56%
Four Lane/Six lane/Eight Lane	12%

Freight movement by Road Transport has been increased from 6 BTK (Billion Tonne km) in 1951 to 600 BTK in 2003-04 and passenger movement by road has risen from 23 BPK (Billion Passenger km) to 3135.4 BPK during the same period. The vehicle population has grown from 0.3 million in 1951 to 72.7 million in year 2004, marking about 240-fold increase. During the same period, the road network has expanded from 0.4 million km to 3.3 million km, i.e. an eight fold increase.

During 10th Plan period, the total outlay for the Central sector roads was Rs. 59,490 crore including Rs. 24,700 crore for the Internal and Extra Budgetary Resources (IEBR). The total amount provided during the 10th Plan at the BE stage was Rs. 62,124.94 crore including Rs. 20,892 crore in IEBR.

NATIONAL HIGHWAYS

The Central Government is responsible for development and maintenance of the National Highways system. The total length of the network, as of today, is 66,590 km. The Ministry is carrying out development and maintenance work of National Highways through three agencies, viz. National Highways Authority of India (NHAI), State Public Works Departments (PWDs) and Border Road Organisation (BRO).

In order to give boost to the economic development of the country, the Government has embarked upon a massive National Highways Development Project (NHDP) in the country. The NHDP is the largest highway project ever undertaken in the country. The NHDP is being implemented by National Highways Authority of India (NHAI).

NHDP Phase I& II: The Phase I & Phase II of NHDP comprises (i) Golden Quadrilateral (GQ), i.e. National Highways connecting four metropolitan cities – Delhi, Mumbai, Chennai & Kolkata having an aggregate length of 5,846 km., (ii) North-South & East-West Corridor (NS-EW) which comprises 4-laning of 7,300 km of National Highways connecting North-South corridor from Srinagar to Kanyakumari with Cochin-Salem spur and East-West corridor from Silchar to Porbandar, (iii) 380 Km length of National Highways are proposed to be upgraded to 4-lane standards for providing connectivity to 10 major ports of the country to NHDP, and (iv) Upgradation of 831 km of other important National Highways. The total estimated cost of the NHDP Phase I & II having a total length of 14,357 km is about Rs.64,639 crore.

NHDP Phase-III: NHDP Phase-III involves 4-laning of 12,109 km of NH having high-density corridor connecting State capitals, important tourist places, economically important areas etc. on PPP basis. The Government has approved implementation of 4,815 km under NHDP Phase-III A. The proposal for implementation of the balance length of about 7,294 km under NHDP Phase-IIIB has been approved recently.

NHDP Phase-IV: Phase IV of NHDP comprising 2-laning with paved shoulders of 20,000 kms of National Highway.

NHDP Phase-V: Phase V of NHDP comprising six laning of 6,500 km of existing 4 lane highways on Design Build Finance & Operate (DBFO) basis was approved on 5.10.2006. This includes 5,700 km of GQ and other selected stretches.

Consultancy works for a length of 1,225 km has already been awarded for feasibility study and bids for 180 km length are under evaluation. Civil works for a length of 148 km was awarded on BOT Concessions and for balance follow up actions are being taken to award the contracts on BOT basis.

NHDP Phase-VI: Government has recently approved the proposal for development of 1000 kms of access controlled four / six lane divided carriageway expressways under NHDP phase-VI on BOT basis at the cost of Rs. 16,680 crores (Rs.7,680 crores as contribution of Government / NHAI for utility shifting, land acquisition etc.).

National Highways Development Projects - Achievements

The overall progress of NHDP as on March 2007 is as under:

NHDP Component	Total Length	Completed Four Lane	Under implementation Length (km)	Under implementation No. of contracts	Balance for award of civil works
GQ	5846	5556	290	33	-
NS-EW	7300+	1129	5149	147	860
Port connectivity	380	148	211	7	21
Other NHs	945	287	638	16	20
NHDP –IIIA	4815	30	1767	27	3018
NHDP-V	6500		148	2	6352
Total	**25786**	**7150**	**8203**	**232**	**10271**

+Out of 7300 kms, 981 kms length is in Phase-I and remaining length is in Phase-II. Against 981 kms, 853 kms length was 4 laned and 354 kms against phase-II including up to DBM level. Actual length at present excluding 442 kms common length with GQ is 7,274 km. However, this may again change after preparation of DPRs. The original approved length of corridors is 7,300 kms

The Way Ahead

The Government has formulated an ambitious plan for investment of Rs.2,35,430 crore for upgradation of National Highways under various phases of NHDP in a phased manner in the years to come. The details of this plan are as under:-

Sl. No.	Phase	Name of Project	Likely Cost (in Rs. Crore)
1.	NHDP Phase-I & II	Completion of Balance work of GQ and EW-NS corridors	52,434
2.	NHDP Phase-III	4-laning of 12,109 km	80,626
3.	NHDP Phase-IV	2-laning with paved shoulders of 20,000 km of National Highways	27,800
4.	NHDP Phase-V	6-laning of 6,500 km of selected stretches of National Highways	41,210
5.	NHDP Phase-VI	Development of 1000 km of Expressways	16,680
6.	NHDP Phase-VII	Construction of ring roads, flyovers and bypasses on selected stretches	16,680
		TOTAL	**2,35,430**

Special Accelerated Road Development Programme for North-East Region (SARDP-NE)

This programme has been framed for improving road connectivity to remote places and places of strategic importance in NE region, envisages improvement of about 3,228 kms of National Highways, about 4,388 kms of State Roads and Roads of

Strategic Importance. This will also ensure the connectivity of all district headquarters, which are still not connected to the National Highways in the eight North-Eastern States.

SARDP-NE includes the projects on the PPP mode and the projects with 603 km length having the estimated cost of about Rs. 3,618 crores have been identified on the BOT(Annuity) mode.

Public-Private Partnership

Traditionally, the road projects were financed only out of the budgetary grants and were controlled / supervised by the Government. The road sector has attracted very limited private sector participation in the past. While the traffic has been constantly increasing at a rapid pace, the traditional system of financing road projects through budgetary allocations has proved to be inadequate. It was in this context that the necessity for exploring the innovative means of financing the highly capital intensive road projects was felt.

The beginning of a significant private sector participation in road projects was made with the launching of India's largest road project - National Highways Development Project (NHDP). To encourage private sector participation, several initiatives have been taken by the government; which include-

- Declaration of the road sector as an industry.
- Provision of capital subsidy up to 40% of the project cost to make projects commercially viable.
- 100% tax exemption in any consecutive 10 years out of the first 20 years of a project.
- Provision of encumbrance free site for work, i.e. the Government shall meet all expenses relating to land and other pre-construction activities.
- Foreign Direct Investment up to 100% in road sector.
- Easier external commercial borrowing norms.
- Higher concession period, (up to 30 years).
- Right to collect and retain toll.

Projects undertaken by the Ministry under Public/Private Partnership

BOT (Toll) Scheme

- In a BOT project, the concessionaire (private sector) is required to meet the upfront cost and the expenditure on annual maintenance. The concessionaire recovers the entire upfront cost along with the interest and a return on investment out of the future toll collection.
- BOT (Toll) Scheme : As on April 2007, 79 projects have been taken up valued about Rs.22,249 crores with a length of about 3,613 kms on Build Operate and Transfer (BOT) basis (Toll based projects). Out of this, 29 projects have been completed and 50 projects are under progress.

BOT (Annuity) Scheme

- In an Annuity project, the concessionaire (private sector) is required to meet the entire upfront cost (no grant is paid by the client) and the expenditure on annual maintenance. The concessionaire recovers the entire investment and a pre-determined cost of return, out of the annuities payable by the client. The tolling is done by the client.

- BOT (Annuity) Scheme: As on April 2007, 24 projects valued about Rs. 9,205.61 crores, with a length of about 1,340 kms have been taken on Annuity basis and out of this 8 projects have been completed.

Central Road Fund

The Central Government has created a dedicated fund, called Central Road Fund from collection of cess from petrol and diesel. Presently, Rs. 2 per litre is collected as cess on petrol and High Speed Diesel (HSD) Oil. The fund is distributed for development and maintenance of National Highways, State roads, rural roads and for provision of road overbridges / underbridges and other safety features at un-manned railway crossings as provided in Central Road Fund Act, 2000.

Out of the cess of Rs. 2 per litre levied, Rs. 1.5 is being allocated in the following manner:

(I) 50% of the cess on high speed diesel (HSD) oil for development of rural roads.

(II) 50% of cess on HSD and the entire cess collected on petrol are allocated thereafter as follows:

a) An amount equal to 57.5% of such sum for the development and maintenance of National Highways;

b) An amount equal to 12.5% for construction of road under or over bridges and safety works at unmanned railway crossings; and

c) An amount equal to 30% on development and maintenance of State Roads. Out of this amount, 10% shall be kept as reserved by the Central Govt. for allocation to States for implementation of State road schemes of inter-state connectivity and economic importance to be approved by the Central Government.

(III) Balance cess of Rs. 0.5 per litre is entirely allocated for development and maintenance of National Highways.

An allocation of Rs.12,830 crores has been made under the CRF for 2007-08 with the following break-up:

1	National Highways	Rs. 6541.06 Cr.
2	Rural Roads	Rs. 3825.0 Cr.
3	Railways	Rs. 724.69 Cr
4	Grant to State Governments and UTs for State roads	Rs. 1565.32 Cr.
5	Grant to States & UTs for Roads of Inter-State Connectivity and Economic Importance	Rs. 173.93 Cr.
	TOTAL	**Rs. 12830.00 Cr.**

State Sector Roads

Since the State Highways and major district and rural roads are the responsibility of respective State governments, these are developed and maintained by various agencies in States and Union Territories. However, the funds are also being provided from the Central Road Fund (CRF) by the Union Government for the development of State roads under the following schemes:

Improvement of State Roads from the CRF.

The funds from the CRF are provided for improvement of State roads other than rural roads. During the year 2006-07, 605 proposals amounting to Rs.1,541.93 crores have been sanctioned for improvement of State roads under CRF. An amount of Rs. 1,565.32 crores has been allocated for the year 2007-08 for improvement of State roads under CRF.

Economic Importance & Inter State Connectivity Scheme

To promote inter-state facilities and also to assist the State governments in their economic development through construction of road bridges between states and of economic importance, Central Government provides 100% grant for inter-state of connectivity projects and 50% grant for projects of economic importance. This fund is also provided from the CRF.

During the year 2006-07, 14 proposals amounting to Rs.103.32 crores with Central share of Rs. 51.66 crore under EI scheme and 41 proposals amounting to Rs. 239.87 crore under ISC scheme have been accorded in-principle approval by the Ministry. An amount of Rs. 173.93 crore (Rs. 164.93 crore for the States and Rs 9.00 crore for UTs) is earmarked under this scheme for the year 2007-08.

Rural Roads

Roads are also being developed in rural areas under the Pradhan Mantri Gram Sadak Yojana (PMGSY). The objective of PMGSY is to link all villages with a population of more than 500 persons with all-weather roads by the year 2007. This is being implemented by Ministry of Rural Development.

Bharat Nirman Yojana

To upgrade rural infrastructure, the Government has formulated a proposal for providing the road connections to more than 38,484 villages above 1000 population and all 20,867 habitations above 500 population in hilly and tribal areas.

To achieve the targets of Bharat Nirman, 1,46,185 kms. of road length is proposed to be constructed by 2009. This will benefit 66,802 unconnected eligible habitations in the country. To ensure full farm-to-market connectivity, it is also proposed to upgrade 1,94,132 kms. of the existing Associated Through Routes. A sum of approximately Rs. 48,000 crore is proposed to be invested to achieve this.

Research and Development in Road Development

The main thrust of research and development (R&D) in the roads sector is to build a sustainable road infrastructure comparable to the best roads in the world. The various components of this strategy are improvement in design, modernization of construction techniques, introduction of improved material conforming to latest trends, evolving better and appropriate specifications, encouraging development and use of new technologies etc. The dissemination of these matters is done through the publication of new guidelines, code of practices, instructions / circulars, compilation of state-of-the-art reports and seminars / presentations etc. The research schemes sponsored by the Department are generally ‘applied’ in nature, which, once completed, would enable them to be adopted by user agencies / departments in their work in the field. The areas covered are roads, road transport, bridges, traffic and transportation techniques etc. The Department takes the help of various

research institutions, academic institutions and universities to implement the schemes. An outlay of Rs 600.00 lakh has been provided for R&D in 2007-08. Some of the ongoing major schemes are as follows:

(A) Roads:

(i) Development of GIS based National Highways information system;

(ii) Guidelines for soil nailing techniques in highway engineering;

(iii) Pilot study on effects of overloading on road infrastructure;

(iv) Investigation on field performance of bituminous mixes with modified binders;

(v) R&D Studies on performance evaluation of rigid pavements on high density traffic corridors using instrumentation supported by laboratory tests.

In addition to the above, the proposal of IIT, Roorkee for establishment of the Ministry's Chair in the institute in the area of development of Highway System has also been approved.

(B) Bridges :

(i) Creation of complete range of independent testing facility at Central Road Research Institute (CRRI), New Delhi.

BORDER ROADS ORGANISATION

The Border Roads Organisation (BRO) is a road construction executive force, integral to and in support of the Army. It started operations in May 1960 with just two projects, Project Tusker (renamed Project Vartak) in the east and Project Beacon in the west. It has now grown into a 13-project executive force, supported by a well-organised recruiting/training centre and two well-equipped base workshops for overhaul of plant/equipment and two Engineer Store Depots for inventory management.

The BRO has not only linked the border areas of the north and north-east with the rest of the country, but also developed the road infrastructure in Bihar, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Andaman and Nicobar Islands, Uttarakhand and Chhattisgarh.

Functions of the BRO

The BRO was brought into being to construct and maintain roads in the border areas, classified as General Staff (GS) roads, in keeping with defence requirements. GS roads are developed and maintained with the funds provided by the Border Roads Development Board (BRDB), through the Department of Road Transport and Highways.

Besides GS roads, BRO also executes Agency Works, which are entrusted to it by other Central government ministries and departments. Works entrusted by public sector undertakings, state governments and other semi-government organizations are executed as Deposit Works. Over the years, the BRO has diversified into the construction of airfields, permanent steel and pre-stressed concrete bridges and accommodation projects.

Important Milestones

- The construction of nine km long Rohtang Tunnel, related access roads to its portals and a 292 km long alternate route to Leh, at an approximate cost of

Rs.1355.82 crore was entrusted to the Organisation. Length of approach road to South Portal of Rohtang Tunnel is 14.84 km and to the North Portal is 0.975 km. The construction works have so far progressed as per target. The target time of completion of Rohtang Tunnel is March 2014.

- The BRO has been entrusted with the four laning of a stretch of NH-1A from Jammu-Vijaypur as part of NHDP's North-South corridor, on behalf of the NHAI. The cost of this project is estimated at Rs.83.88 crore.
- A part of Phase A of the Special Accelerated Road Development Programme for North-East (SARDP-NE) has been entrusted to BRO. The work involves construction of new roads and improvement of existing roads to double lane under a phased programme. Widening of 492 km of roads with a rough cost of Rs.1400 crore under Phase A and preparation of DPR for the roads earmarked in Phase B have been entrusted to the BRO. The works have commenced in the year 2006-07.
- BRO has been assigned the task of rehabilitation of roads in the tsunami affected areas of Andaman and Nicobar Islands. A team of about 300 personnel and 50 vehicles / equipment / plants have been inducted into Andaman and Nicobar Islands. Rs.10 crore for mobilization advance and Rs.72.11 crore for North-South and East-West roads has been deposited by the Andaman & Nicobar administration. The work is in progress.
- Under the Re-construction plan for Jammu & Kashmir announced by the Prime Minister, work of upgradation of 94 km long Srinagar-Uri (NH1A), 17.25 km long Uri-LoC road, double laning of 260 km long Batote-Kishtwar-Anantnag (NH-1B), double laning of 422 km long Srinagar-Leh road via Kargil (NH-1D) and widening of 14.14 km long Domel-Katra (NH-1C) has been entrusted to the BRO. The approximate cost of these projects is Rs.2,308.81 crores and the projects are scheduled for completion by 2012.

SHIPPING

Shipping plays an important role in the transport sector of India's economy. Approximately, 95 per cent of the country's trade by volume (70 per cent in terms of value) is moved by sea. India has the largest merchant shipping fleet among the developing countries and ranks 17th amongst the countries with the largest cargo carrying fleet with 7.07 million GT and the average of the fleet being 17 years. Indian maritime sector facilitates not only transportation of national and international cargo but also provides a variety of other services such as cargo handling services, shipbuilding and ship repairing, freight forwarding, lighthouse facilities and training of marine personnel, etc. As on 31 December 2005 the Indian fleet (ships of 150 GT and above) comprised 707 ships with 8.29 million GT and 13.72 million DWT.

The salient features of India's shipping policy are the promotion of national shipping to increase self-reliance in the carriage of the country's overseas trade and protection of stakeholders' interest in EXIM trade. India's national flag-ships provide an essential means of transport for crude oil and petroleum product imports. National shipping makes significant contribution to the foreign exchange earnings of the country.

Indian Fleet : India's shipping fleet as on 31 December 2005, comprised 237 overseas vessels with 74,81,790 GRT and 470 coastal vessels with 8,04,612 GRT. There has been a net increase of over 1.06 million GT in the tonnage during the year 2004-05.

Indian shipping tonnage, which was only 1.92 lakh GT on the eve of independence, now stands at 8.29 million GT. The tonnage position as on 31 December 2005 was 707 ships with 82,86,402 GRT. Due to various facilitative measures adopted by the Government, especially the tonnage tax scheme, there has been an increase of 15.39 per cent in the total GT between the years 2003-04 and 2004-05.

The total quantity of cargo handled at various Indian ports during the year 2003-04 increased to 344.55 million tonnes from 313.53 million tonnes in 2002-03. In the overseas trade, though the total volume has shown an increase from 273.04 million tonnes in 2001-02 to 280.34 MT in 2002-03, the share of cargo carried by Indian flag vessels during the period has declined from 17 to 15.1 per cent. It has been pointed out by the Working Group of the Planning Commission on Shipping for the 10th Plan that the present fleet strength is not adequate to support the trade flow in the shipping sector. Therefore, there is an imperative need for augmenting the tonnage capacity to cater to the projected traffic estimated to be 537 MT for 2005-2006 and 1273 MT by 2020.

Coastal Shipping : Coastal shipping is an energy-efficient, environment-friendly and economical mode of transport in the Indian transport network and a crucial component for the development of domestic industry and trade. India, with her 7,516.6 km long coastline studded with 13 major ports and 184 non-major ports, provides congenial and favourable conditions for the development of this alternate mode of transport.

India's coastal shipping tonnage as on 31 December 2005 was 470 vessels with 804612 GRT. Action plan for the development of coastal shipping is already on the anvil with the Central Government. With a view to promote coastal shipping and sailing vessel industry, the home trade vessels and sailing vessels have been exempted from the payment of lighthouse dues under the provisions of the Lighthouse Act, 1927. Meanwhile, a study has already been completed by the Tata Consultancy Services (TCS) to assess the potential of coastal shipping and the role of minor ports keeping in view the feasibility of routes and the supporting environment needed for its development. Efforts are being made to develop minor ports, which would, in turn, develop coastal shipping.

Aids to Navigation : Since Independence, India has made rapid growth in aids to marine navigation. From 17 Lighthouses prior to Independence, the present strength of aids to Navigation consists of 167 Lighthouses, one Lightship, six Loran-C Chain Stations, 40 Racons, 21 Deep Sea Lighted Buoys and 22 installations under Differential Global Positioning System (DGPS). To cater to the needs of light stations in the islands and for maintaining the buoys, the Directorate General of Lighthouses and Lightships is maintaining three launches, one mechanised boat and two large ocean going vessels, M.V. Sagardeep-II and M.V. Pradeep. A major scheme titled Coastal Vessel Traffic Service in the Gulf of Kachch was sanctioned in January 2002 at an estimated cost of Rs 165 crore. The project is likely to be completed by 2007 and will provide efficient navigational services in this area.

Maritime Training : The Director General of Shipping is responsible for creation of the trained manpower required for the merchant navy fleet of the country. This national obligation is being met through the Government training institutes and a

number of other approved training institutes in the private sector. The importance of organised training was recognised in the year 1927 when the Training Ship “Dufferin” was established. Since then many highly skilled Indian seafarers have been trained in India who have earned commendable reputation at home and abroad.

The four training institutes, which were established by the Government are :

1. **Training Ship 'Chanakya';** which conducts (i) Three years B.Sc. degree course in Nautical Sciencs under the University of Mumbai, (ii) Pre-Sea training course for Deck Cadets.
2. **Marine Engineering and Research Institute (MERI), Kolkata;** which conducts four-years degree course in Marine Enginering under Jadhavpur University.
3. **Marine Engineering & Research Institure (MERI), Mumbai;** conducts (i) one-year Training Marine Engineering course for graduate Mechanical Engineers and (ii) Three-year B.Sc. degree course in Martime Sciences (polyvalent degree) under the University of Mumbai.
4. **LBS College of Advance Maritime Studies & Research, Mumbai,** conducts almost 36 post-sea training courses for serving Marine Officers.

In addition to the above, there are more training institutes in the private sector approved by the Director General of Shipping, imparting pre-sea and post-sea training in various disciplines.

In the wake of coming into force of the STCW 95 and the Regulations thereunder stipulated by the International Maritime Organisation in 1997, the maritime training in India has undergone a sea change. New courses are being introduced. In order to meet the competition prevailing elsewhere in the world, the training requires to satisfy the international standards stipulated under STCW 95. With this in view, the Government as the first step towards the formation of a Maritime University has formed the Indian Institute of Maritime Studies registered under the Societies’ Registration Act, 1860 and has brought all the four Government Training Institutes under its control. The Government is considering the formation of a full-fledged Maritime University.

SHIPPING CORPORATION OF INDIA LIMITED

The Shipping Corporation of India Ltd (SCI) was formed on 2 October 1961. The present authorised capital of the Company is Rs 450 crore and paid up capital is Rs 282.30 crore. The status of SCI has been changed from a private limited company to Public Limited from 18 September 1992. The SCI was conferred ‘Mini Ratna’ status by the Government of India on 24 February 2000. At present, the Government is holding 80.12 per cent of its share capital and the balance is held by financial institutions, public and others (NRIs, corporate bodies, etc.). SCI has been signing Memoranda of Understanding with the Ministry of Shipping and has received "Excellent" rating consistently for 13 years, up to the year 2003-2004. For the year 2004-2005 also, SCI's performance on the basis of provisional results was ranked as "Excellent". The SCI signed the MOU for the financial year 2005-2006 with the Ministry of Shipping, Road Transport & Highways, Government of India on 31 March 2005.

The share of SCI in total Indian tonnage in terms of GT is about 34 per cent and in DWT terms about 35 per cent. The SCI’s present fleet stands at 84 vessels aggregating about 2.8 million GT (4.9 million DWT) comprising general cargo vessels,

cellular container vessels, crude oil tankers (including combination carriers and VLCC), product tankers, bulk carriers, LPG / Ammonia carriers, acid carriers, passenger vessels and offshore supply vessels. The SCI provides liner and passenger services, bulk carrier and tanker service and offshore services and specialised services, etc. Additionally, the SCI also mans and manages 53 vessels aggregating to 0.12 million GT (0.07 million DWT) on behalf of Andaman & Nicobar Islands Administration, Union Territory of Lakshadweep Administration, Oil and Natural Gas Corporation, Geological Survey of India (Ministry of Steel and Mines) and Department of Ocean Develpment.

The SCI has maintained a consistent track record of profitability and dividend. The turnover for the financial year 2004-05 was Rs. 4018.6 crore and the net profit after deducting tax was Rs. 1419.9 crore. The SCI is a pioneer in India with regard to (a) STS operations for crude, POL and dry bulk cargoes, (b) Cryogenic operations (LNG / LPG), (c) Joint Ventures and other types of collaborations in shipping, and (d) shipping consultancy services.

The training of personnel acquired a new dimension with the setting up of a Maritime Training Institute (MTI) at Powai, Mumbai. The MTI has extensive modern training facilities so as to ensure that the skill and expertise of the SCI personnel is at international levels. Since June 1988, all the SCI in-house courses are being conducted at the MTI. It is recognised as a branch of the World Maritime University Malmo (Sweden) for conducting International Maritime Organisation (IMO) seminars and short specialised courses in India for the countries of South-East Asia and Pacific region. MTI is also recognised as an UNCTAD training centre for shipping management courses. MTI has been awarded the coveted Golden Peacock Award for excellence in Training.

Liquefied Natural Gas (Joint Ventures): LNG has been identified as the future fuel for India's power plants and as a feedstock for Chemical / Petrochemical Industry. The SCI has identified carriage of Liquefied Natural Gas (LNG) as one of its thrust and growth areas and has its presence in the Petronet LNG project.

Petronet LNG Project (PLP): Two JVCs have been formed at Malta, viz. India LNG Transport Co. No. 1 & No. 2 Ltd. for construction, ownership and operation of two LNG tankers which are on time charter to Petronet LNG Ltd. for a period of 24 years. The SCI and Mitsui OSK Line (MOL) have a 29.08 per cent stake each in the consortium amounting to an equity participation of US $ 27.626 million each with the remaining 41.84 per cent being shared by NYK (17.89 per cent), K Line (8.95 per cent) and Qatar Shipping Co. (15 per cent). The Time Charter Agreement provides for transfer of know-how to SCI within 5 years of registration of the tankers after which SCI would manage the operations of the tankers and its shareholding would go up to 42.5 per cent. The Agreement also provides that the tankers' flag be changed to Indian flag subject to zero level of tax for LNG tankers declared by the Government of India based on tonnage tax regime applied in other countries. This is required to be done within one year of such notification, provided the transfer of know-how has taken place. The first ship (Disha) was delivered in January 2004 while the second ship (Raahee) was delivered in December 2004. The first LNG cargo for the project was carried in January 2004 by the first tanker, which operates regularly between Ras Laffan, Qatar and Dahej Terminal of Petronet LNG Ltd.

MOU with National Iranian Tanker Company : The Shipping Corporation of India Ltd. (SCI) has entered into a Memorandum of Understanding (MoU) with the

National Iranian Tanker Company (NITC) to form a joint venture for transportation of LNG, petrochemicals and other crude oil products from Iran to India with a view to further strengthening its position as the leading Indian LNG shipping company. The proposed joint venture is envisaged to build, own and operate LNG tankers that will carry the LNG exports from Iran to India.

With import of LNG getting a significant thrust in order to bridge the gap between demand and supply in the country, SCI expects to, yet again, play a key role in transportation of this eco-friendly source of energy for the country. The SCI would continue to pursue suitable opportunities for participation in more LNG shipping contracts in the future.

Irano Hind Shipping Company (IHSC): SCI has another joint venture in Iran, viz. Irano Hind Shipping Company, which continues to operate successfully for over three decades. The Jonit Venture between SCI and Islamic Republic of Iran Shipping Lines (IRISIL) was established at Tehran, in March 1975. IHSC together with its subsidiaries, as at the end of the financial year 2003-2004, comprises 6 ships of 0.283 million DWT.

COCHIN SHIPYARD LIMITED (CSL)

CSL was incorporated as a Company fully owned by Government of India in March 1972. Work on the project commenced in 1972 and was completed by January 1983. Consultancy services of M/s Mitsubishi Heavy Industries Japan were availed for design and construction of the Yard. As of now the shipyard is an ISO: 9001:2000 certified company for shipbuilding, ship repair and marine engineering training. The yard is capable of constructing and repair of ships upto 110000 DWT and 125000 DWT respectively. This is the maximum capacity for shipbuilding and ship repair in the country. The shipyard has so far built over 50 vessels of varied sizes/ description which include tankers, bulk carriers, high bollard pull tugs, patrol vessels, passenger vessels, dredgers, etc. As on 1 April 2005 the shipyard had orders to construct 15 vessels - all export orders. These consist of five tug boats for M/s A.A. Turkey Corporation Saudi Arabia, six 30000 DWT bulk carriers for M/s Clippers Group Denmark and four Platform Supply Vessels for M/s Sea Tankers Management Company Norway. The total value of these orders including subsidy is Rs. 953.54 crore. The country's first indigenous aircraft carrier, the largest warship ever to be built in India is being constructed at this shipyard. The steel cutting for the aircraft carriers commenced on 11 April 2005. Ship repair operations in CSL commenced in 1983. So far around 900 ships of varied descriptions have been reparied in the yard. These include upgradation of vessels belonging to oil exploration industry, periodical lay up repairs and life extension of ships of Navy, Shipping Corporation of India, Union Territory of Lakshadweep, Coast Guard and Port Trusts, etc. During 2004-05 the ship repair turnover was to the tune Rs. 129.00 crore. The shipyard has been generating profits for over a decade. Net profit during 2004-05 was Rs. 12.94 crores.

GARDEN REACH SHIPBUILDERS & ENGINEERS LTD, KOLKATA

The Garden Reach Shipbuilders & Engineers Limited was incorporated as a joint stock company in 1934, under the name M/s Garden Reach Workshop Limited (GRW). The Government of India acquired the company in 1960. It was renamed as ‘‘Garden Reach Shipbuilders & Engineers Limited (GRSE)’’ on 01 January 1977. Since then, it has grown and diversified its activities and is now a multi-unit shipyard with a Shipbuilding Division and an Engineering and Engine Division. The company

builds and repairs warships and auxiliary vessels for the Navy and the Coast Guard. Its present product range includes corvettes, frigates, fleet tankers, patrol vessels, fast attack craft, high technology ship borne equipment, portable bailey type steel bridges, turbine pumps for the agricultural sector, marine sewage treatment plants, diesel engines etc. "mini-ratna status category-I" was conferred on GRSE on5 September 2006.

GRSE'S significant achievements during FY 2006-07 have been:

(i) One Landing Ship Tank (Large), INS Shardul and two Fast Attack Crafts, INS Batti Malv & INS Baratang, have been delivered to the Indian Navy.

(ii) GRSE bagged orders for 10 Waterjet FACs from Indian Navy and 2 each of 65 Pax & 100 Pax boats from Andaman & Nicobar Islands Administration.

(iii) The company has acquired Rajabagan Dockyard with effect from 01 July 2006 from Central Inland Water Transport Corporation Ltd. (A Company under Ministry of Surface Transport).

(iv) Raksha Mantri's "Award for Excellence" was presented to GRSE for design efforts for FY 2005-06 in respect of Waterjet FACs.

(v) Engineering Division obtained the patent rights on 09 February 2007 for designing and developing the 'Double Lane Modular Steel Bridge' effective from 16 January 2003.

In order to reduce the 'build period' of ships for faster delivery, GRSE has embarked on a Modernisation Plan to the tune of Rs 402 crore in phases. The Modernisation Plan is being jointly funded by GRSE and Navy / MOD against the ASW(C) project under progress in GRSE. GRSE's contribution is of Rs 184 crores. The overall effect of the modernisation will lead to enhancement of shipbuilding capacity, offer greater flexibility to adopt modern / modular build strategies, provide a framework for significant productivity improvement, shorter erection berth cycle with more out-fitting at launching stage and effective connectivity-cum-integration of facilities. The modernisation is expected to be completed in 2010.

HINDUSTAN SHIPYARD LIMITED, VISAKHAPATNAM

Hindustan Shipyard Limited (HSL), Visakhapatnam was set up in 1941 in the private sector and was taken over by the Government in 1952. In 1962, the shipyard became a central public sector enterprise. The shipbuilding capacity of the yard is 3.5 pioneer class vessels of 21,500 DWT each. The maximum size of the vessel that could be built is 50,000 DWT. The yard has slipways, covered building dock, wet basin and outfit jetty. HSL is the first shipbuilding yard in the country which was awarded ISO:9001 certification by Lloyds Register of Quality Assurance, London for international standard of quality assurance. For ship repairs, the yard has facilities such as modern dry dock, wet basin, repair shops, etc., and it can undertake repairs of submarine, tankers and ships having capacity of up to 70,000 DWT. HSL has an exclusive offshore platform construction yard capable of constructing two platforms per annum. Other infrastructure facilities include engineering shops, cranes and load-out facilities.

The present order book position of the yard is of the value of around Rs. 1182 crore. HSL has obtained a Letter of Intent for four 30,000 DWT dry bulk carriers and six 53,000 DWT handy max bulk carriers from M / s Goodearth Maritime Limited, Chennai.

HOOGHLY DOCK AND PORT ENGINEERS LIMITED, KOLKATA

Hooghly Dock and Port Engineers Limited (HDPEL), Kolkata became a Central Public Sector Undertaking in 1984. The Company has two working units in Howrah district of West Bengal, one at Salkia and another at Nazirgunge. The installed capacity in shipbuilding is 1,100 tonnes per annum and in ship repairs 125 ships per annum. Apart from a dry dock and a jetty, it has six shipways. The yard is capable of constructing various types of ships (including passenger ships) and other vessels such as dredgers, tugs, floating dry docks, fishing trawlers, supply-cum-support vessels, multi-purpose harbour vessels, lighthouse tender vessels, barges, mooring launches, etc., and undertaking repairs of different types of vessels.

HDPEL presently has orders in hand for construction of one each of 25-tonne multipurpose bollard pull tug of dredging corporation of india, 300 M.T. oil tanker cargo vessel, 300-ton M.T. container cargo vessel, hydraulic surface dredger and two 300 M.T. self loading cargo vessel of inland waterways authority of india. During April 2005 the shipyard delivered one 400-passenger-cum-100 ton cargo vessel to Andaman & Nicobar Administration.

PORTS

The coastline of India is dotted with 12 major ports and about 200 non-major ports. The major ports are under the purview of the Central while the non-major ports come under the juridiction of the respective State governments.

The 12 major ports (including the Port of Ennore which is a corporate port set up under the Indian Companies Act, 1956) are evenly spread out on the Eastern and Western Coasts. The ports of Kolkata, Paradip, Visakhapatnam, Chennai, Ennore and Tuticorin are on the Eastern Coast of India while the ports of Cochin, New Managalore, Mormugao, Mumbai, Jawaharlal Nehru at Jhavasheva and Kandla are on the Western Coast.

The capacity of major ports has increased from 20 million tonnes per annum (MTPA) in 1951 to 504.75 MTPA as on 31st March, 2007. At the begining of the 10th Plan, the capacity of the major ports was 343.95 MTPA which has increased to 504.75 MTPA at the end of the 10th Plan (i.e. as on 31st March, 2007) thereby achieving the capacity addition of 160.80 MTPA. In all the years of 10th five year plan the capacity at the major ports exceedded the traffic handled. The non-major ports handled a traffic of 185.54 MT in 2006-07 and had a capacity of 228 MTPA at the end of 2006-07.

The total traffic handled at the major ports has increased from 313.55 MT at the beginnig of the 10th Five Year Plan to 463.84 MT in 2006-07 out of which the container traffic was 73.48 MT. The container traffic in the major ports has increased from 37.23 MT at the end of 9th Five Year Plan to 73.48 MT in 2006-07 thereby achieving a CARG of 14.5%.

In order to improve efficiency, productivity and quality of services as well as to bring in competitiveness in port services, the port sector has been thrown open to private sector participation, The Major Port Trust Act, 1963 permits parivet sector particiaption in major ports invites Foregin Direct Investment (FDI) upto 100% under the automatic route is permitted for construction and maintenance of ports and harbours. Private Sector participation and mainteannce of ports and harbours. Private sector participation has been allowed in a variety of ports services which includes construction and operation of terminals/berhs, warehousing/storage facilitiy, dry docking and ship repair facilities.

Till date 16 private sector projects involving an investment of Rs. 4504 crores ahsbeen operationalised which involves capacity addition of 93,90 MTPA. 87 projects are under various stages of evaluation and implementation which involves an investment of Rs. 5,627 crores.

INLAND WATER TRANSPORT

India has about 14,500 km of navigable waterways which comprise rivers, canals, backwaters, creeks, etc. About 44 million tonnes of cargo is being moved annually by Inland Water Transport (IWT), a fuel-efficient and environment-friendly mode. Its operations are currently restricted to a few stretches in the Ganga-Bhagirathi-Hooghly Rivers, the Brahmaputra, the Barak River, the rivers in Goa, the backwaters in Kerala, inland waters in Mumbai and the deltaic regions of the Godavari-Krishna rivers. Besides the organised operations by mechanised vessels, country boats of various capacities also operate in various rivers and canals. Data of cargo and passenger movement in unorganised sector (i.e. by country boats, etc.) has not been compiled (for which efforts are on) but it is a fact that substantial quantum of cargo and passengers are transported in the unorganised sector as well.

Inland Waterways Authority of India : The Inland Waterways Authority of India (IWAI) came into existence on 27 October 1986 for development and regulation of inland waterways for shipping and navigation. The Authority primarily undertakes projects for development and maintenance of IWT infrastructrue on national waterways through grant received from Ministry of Shipping, Road Transport and Highways. The head office of the Authority is located at Noida. The Authority also has its regional offices at Patna, Kolkata, Guwahati and Kochi and sub-offices at Allahabad, Varanasi, Bhagalpur, Farakka and Kollam.

National Waterways : The Ganga between Allahabad – Haldia (1620 km) the Sadiya-Dhubri stretch of river Brahmaputra (891 km) and the Kollam-Kottapuram stretch of West Coast Canal along with Champakara and Udyogmandal Canals (205 km) in Kerala have so far been declared as National Waterways and are being developed for navigation by IWAI.

Centrally Sponsored Scheme : For overall development of IWT sector in the country it is necessary that national waterways as well as other waterways are developed side by side. While the development and regulation of national waterways becomes the responsibility of Central Govt. / IWAI, the respective state Governments should develop other waterways. To encourage the states for IWT development, there is a centrally sponsored scheme (CSS) for IWT. Under the CSS, 100 per cent grant is provided for the projects of north-eastern states including Sikkim and 90 per cent grant for other states.

Inland Vessel Building Subsidy Scheme : In order to reduce the capital burden on the IWT operators, and to enhance their profitability, an inland vessel building subsidy scheme has been introduced under which 30 per cent cost of an inland vessel is subsidised by the Central Government. This is applicable to both cargo and passenger inland vessels meant for operation in National Waterways, Sunderbans waterways and Indo-Bangladesh Protocol routes. This is for vessels acquired from a shipyard in India.

Protocol on Inland Water Transit and Trade : An Inland Water Transit and Trade protocol exists between India and Bangladesh under which inland vessels of one country can transit through the specified routes of the other country. The existing

protocol routes are : (i) Kolkata-Pandu-Kolkata, (ii) Kolkata-Karimganj-Kolkata, (iii) Rajshahi-Dhulian-Rajshahi and (iv) Pandu-Karimganj-Pandu.

For inter-country trade, four ports of call have been designated in each country namely, Haldia, Kolkata, Pandu and Karimganj in India and Narayanganj, Khulna, Mongla and Sirajganj in Bangladesh. Under the protocol, 50 : 50 cargo sharing by Indian and Bangladeshi vessels is permitted both for transit and inter country trade.

Public Private Partnership in Inland Water Transport Sector : With a view to providing an impetus to development of inland water transport mode, the Government of India have approved Inland Water Transport Policy which includes several fiscal concessions, and policy guidelines for rapid development of the mode and to encourage private sector participation in development of infrastructure and ownership and opertion of inland vessels. IWAI is also authorised for joint ventures and equity participation in BOT projects.

National Inland Navigation Institute : An institute of national importance, viz. National Inland Navigation Institute (NINI), Patna, became functional from February 2004. This is the first institute of its kind in the country. About 300 trainees have successfully completed the vessel crew training course from this Institute so far.

Central Inland Water Transport Corporation (CIWTC) : The Central Inland Water Transport Corporation (CIWTC) with its headquarters at Kolkata was set up as a public undertaking in May 1967. The CIWTC is mainly engaged in transportation of goods by inland waterways in the Ganga-Bhagirathi-Hooghly, Sunderbans and Brahmaputra rivers. They are operating regular cargo services between Kolkata and Pandu (near Guwahati), between Kolkata and Karimganj (Assam), Kolkata-Bangladesh and between Haldia and Patna.

CIVIL AVIATION

The Ministry of Civil Aviation is responsible for the formulation of national policies and programmes for development and regulation of civil aviation and for devising and implementing schemes for orderly growth and expansion of civil air transport. Its functions also extend to overseeing the provision of airport facilities, air traffic services, carriage of passengers and goods by air, safeguarding civil aviation operations, regulation of air transport services, licensing of aerodromes, air carriers, pilots and aircraft maintenance engineers.

India has been a member of the International Civil Aviation Organisation (ICAO) and is also on the Council of ICAO since its inception. The civil aviation sector has three main functional divisions–regulatory, infrastructural and operational. The civil aviation sector in India has seen a phenomenal growth in the recent years. As on date there are a large number of companies providing passenger transport and cargo handling services in the country. The Air Transport Companies are both in the public sector and in the private sector. In the public sector, there are Air India, Indian Airlines, Air India Charters Limited (Air India Express) and Alliance Air.

Apart from Air India, Indian Airlines, Alliance Air and Air India Charters Ltd., there are at present eight private scheduled operators, viz. Jet Airways (India) Ltd., Sahara Airlines Ltd., Deccan Aviation (P) Ltd., Go Airways, Kingfisher Airlines, Paramount Airways Pvt. Ltd., Go Airlines (India) Pvt Ltd., and Inter Globe Aviation Ltd. (Indigo) operating on the domestic sector providing a wide choice of flights

and connectivity to various parts of India. One cargo airline viz. Blue Dart Aviation Pvt. Ltd. is also operating scheduled cargo services in the country. During the year 2006, a total number of 3,83,413 flights were operated by the domestic scheduled operators carrying a total of 32.172 million passengers. In addition to the above-mentioned scheduled airlines, there are at present 59 companies holding non-scheduled air transport operators permit. While Air India mainly provides international services, Indian Airlines has also been operating to the neighboring countries in South-East Asia and the West Asia. The private scheduled airlines Jet Airways and Sahara Airlines have been operating on international sectors to Colombo, Kathmandu, Singapore, UK, Thailand, Malaysia and USA. Pawan Hans Helicopters Ltd., a public sector company, is engaged in providing helicopter services to ONGC for its offshore operations. Pawan Hans Helicopters are also used by various State Governments, specially in North-East region, to provide connectivity to inaccessible areas and difficult terrains.

CARGO

Airports Authority of India (AAI) has established integrated cargo terminals at metro airports, viz. Delhi, Mumbai, Kolkata and Chennai, wherein all the regulatory and facilitating agencies have been housed under one roof in order to facilitate faster processing / movement / clearance of international cargo. The managements of Delhi and Mumbai Airports have been taken over by the two separate JVCs namely Delhi International Airport Limited and Mumbai International Airport Limited respectively, with effect from 3rd May 2006.

In order to reduce the burden on the existing infrastructure available at the metro airports, it would be necessary to develop the alternate infrastructure in and around the airports for processing / handling of international cargo. Therefore, this Ministry is considering the concept of setting up "Cargo Villages" at the International Airports.

AIR SERVICES

As on 30th June 2007, India has bilateral Air Services Agreements with 101 countries. The India-US Aviation market has registered significant growth pursuant to the new revised agreement signed between the two countries in 2005. Liberalized agreements have also been concluded with some important traffic markets like UK, China, Australia, Germany, Netherlands, Japan, Canada, Singapore, New Zealand, UAE, Thailand, France, Kuwait, Oman, Spain etc. keeping in view the higher utilization of our bilateral entitlements. With a view to optimally utilizing our bilateral entitlements, Indian scheduled carriers with at least five years continuous operations in the domestic sector and fleet size of 20 aircraft have also been permitted to operate to most overseas destinations.

TOURIST CHARTER FLIGHTS

The tourist charter guidelines have been further liberalized vide Aeronautical Information Circular No.5 / 2006. Now, there is no restriction on maximum and minimum length of stay or tourists arriving on chartered flights. The requirement of 2:1 between inbound and outbound charters has also been dispensed with for the outbound stations. A total of 770 charter flights were operated to India from January to December 2006 bringing in 1,84,076 foreign tourists. The notice period of an aircraft for the scheduled airline to be used for outbound charter has been brought down from seven working days to three working days.

DIRECTORATE GENERAL OF CIVIL AVIATION

The Directorate General of Civil Aviation (DGCA) is the principal regulatory body in the field of civil aviation in India. It is responsible for (i) Regulation of air transport services to / from and within India in accordance with the provisions of the Aircraft Rules, 1937, including bilateral and multilateral agreements with foreign countries and the policy pronouncements of the Government; (ii) licensing of pilots, aircraft maintenance engineers and monitoring of flight crew standards; (iii) registration of civil aircraft; (iv) laying down airworthiness requirements for civil aircraft registered in India and grant of Certificate of Airworthiness to such aircraft; (v) co-ordination of the work relating to International Civil Aviation Organisation; (vi) investigation of minor air accidents and incidents and rendering technical assistance to the Courts / Committees of Inquiry appointed by the Government; (vii) supervision of training activities of Flying / Gliding Clubs; (viii) licensing of aerodromes and air carriers; (ix) rendering advice to the Government on matters pertaining to air transport including bilateral air services agreements with foreign countries; (x) development of light aircraft, gliders and winches; (xi) processing amendments to the Aircraft Act, 1934 and the Aircraft Rules 1937, and other Acts relating to aviation, with a view to implementing in India the provisions of the Chicago Convention and Annexes thereto and other international conventions relating to aviation; and (xii) type certification of aircraft.

To examine / review the different aspects of the functioning of DGCA and make appropriate recommendations, a Committee under the Chairmanship of Shri M.K. Kaw, former Secretary (CA) was constituted in August, 2005. Report of the Committee has been received and most of its recommendations have been accepted by the Government and are in the process of implementation.

BUREAU OF CIVIL AVIATION SECURITY

The Bureau of Civil Aviation Security (BCAS) is an attached office of the Ministry of Civil Aviation and is the regulator for civil aviation security in the country. The Commissioner of Security (CA), BCAS is the “Appropriate Authority” to ensure development, maintenance, updating and implementation of National Aviation Security Programme for India and fulfil all international obligations in this context. The BCAS has its headquarters in New Delhi and 4 Regional Offices located at Delhi, Kolkata, Mumbai and Chennai airports, each under a Deputy Commissioner of Security (CA), regulating, monitoring and conducting regular Security Inspections and audits of the airports in Northern, Eastern, Western and Southern region, respectively.

The BCAS is responsible for laying down the standards for pre-embarkation security and anti-sabotage measures in respect of civil flights and ensuring their compliance through regular Inspections and Security Audits. The aim of BCAS is to safeguard Civil Aviation operations against acts of unlawful interference.

The Bureau is the regulatory authority for discharging all relevant national and international obligations in respect of training of personnel in aviation security responsibilities which include, inter-alia, planning and co-ordination of all aviation security related activities, operational emergencies and crisis management.

The Bureau of Civil Aviation Security has four Bomb Detection and Disposal Squads (BDDS) positioned at International Airports of Delhi, Mumbai, Kolkata and Chennai with latest sophisticated equipment like Robot, Real Time Viewing System

(RTVS), Electronic Stethoscope, Explosive Detector, etc. The BDDS units at the four metros are complemented by a dog squad dedicated to the concerned airports. A dog squad has been deployed by BCAS at Srinagar airport also. These squads are used to safely handle sophisticated Improvised Explosive Devices (IEDs) and other explosives and assist local police in explosive investigations from time to time.

AIRPORTS AUTHORITY OF INDIA

The Airports Authority of India (AAI) was formed on 1 April 1995 and is responsible for (i) providing safe and efficient Air Traffic Services, communication and navigational aids at all the airports, (ii) plan, develop, construct and maintain runway, taxiways, apron, terminal building, etc., (iii) provide Air Safety Services and (iv) arrange search and rescue facilities in co-ordination with other agencies and other functions as per AAI Act. AAI manages 133 airports including 17 international (10 AAI, 2 JVC & 4 Civil enclaves and one private airport), Domestic airports (08 customs and 80 domestic airports) and 24 civil enclaves at defence airfields. In addition, AAI provides CNS-ATM facilities at 05 airports. It controls and manages the entire Indian airspace – 2.8 million square nautical miles which includes 1.05 million square nautical miles on land and 1.75 million nautical miles oceanic airspace and restricted land area of 0.37 million square nautical mile that is under control of Defence.

AAI has a Civil Aviation Training College at Allahabad for imparting training on various operational areas like Air Traffic Control, Radars, Communication, etc. It maintains the National Institute of Aviation Management and Research (NIAMAR) at Delhi for imparting various aviation management training programmes and refresher courses. In addition there is a Fire Service Training School at Narayanpur near Kolkata and the Fire Training Centre at New Delhi for imparting training and conducting refresher courses on fire fighting rescue services.

GAGAN PROJECT

GPS Aided Geo Augmented Navigation "Gagan" is an augmentation system to enhance the accuracy and integrity of GPS signals to meet precision approach requirements in Civil Aviation and is being implemented jointly by AAI and ISRO in three phases. Technology Demonstration System will be upgraded to a full operational capability system in the second and third phase. Order for ground-based requirements have been placed on M/s. Raytheon. GSAT IV being fabricated by ISRO will carry Gagan payload. The footprint of this satellite will cover a vast geographical area from Africa to Australia and hence would facilitate expansion of the service area of "Gagan" far beyond Indian airspace. When implemented, this would replace most of the ground-based navigational aids and it would be possible to provide precision approach and landing guidance up to category I to aircraft hitherto not available due to terrain conditions precluding the provision of Instrument Landing System.

DEVELOPMENT OF NON-METRO AIRPORTS BY AAI

Since last few years, aviation industry in India is growing by leaps and bounds. In order to meet the growing demand for infrastructure at the airports, Airports Authority of India has decided to modernize and develop 35 non-metro airports by providing world class infrastructure facilities at these airports. The 35 Non-Metro airports identified are Ahmedabad, Amritsar, Guwahati, Jaipur, Udaipur,

Trivandrum, Lucknow, Goa, Madurai, Mangalore, Agatti, Aurangabad, Khajuraho, Rajkot, Vadodara, Bhopal, Indore, Nagpur, Visakhapatanam, Trichy, Bhubaneswar, Coimbatore, Patna, Port Blair, Varanasi, Agartala, Dehradun, Imphal, Ranchi, Rajpur, Agra, Chandigarh, Dimapur, Jammu and Pune.

Global Technical Adviser (GTA) and Indian Financial Consultant (IFC) have been appointed to work out Techno Economic Feasibility Report (TEFR) or master planning phase-wise development works on modification / expansion and / or new construction of terminal building, land use plans and models etc. specific to each airport. All these modernization and development works are likely to be completed by 2010.

RESTRUCTURING OF DELHI AND MUMBAI AIRPORTS

Cabinet approved selection of Private Partner on 01st February 2006. The two airports have been handed over to the Joint Venture Companies with effect from 2nd August 2006 for operation, management and development. The two joint venture companies have submitted their Master Plans for development of these airports.

GREENFIELD AIRPORTS

Bangalore International Airport

Greenfield airport project at Devanhalli near Bangalore is being implemented on a Build Own Operate and Transfer (BOOT) basis for 30 years with Public Private Participation (PPP) at a revised cost of Rs. 1930 crores. Government of Karnataka and AAI together hold 26% equity in this joint venture while the strategic partners hold balance 74%. AAI's investment in the equity is capped at Rs. 50 crore. A Consortium led by Siemens, Germany with Unique Zurich, Switzerland and Larsen & Toubro India Limited, as other members have been chosen as the strategic Joint Venture Partners. All necessary agreements have been executed. New airport is expected to become operational by middle of next year i.e. April, 2008.

Hyderabad International Airport

A Greenfield airport is being similarly developed at Shamshabad, near Hyderabad on Build Own Operate Transfer (BOOT) basis with Public Private Participation (PPP) by the Government of Andhra Pradesh. Airports Authority of India and Government of Andhra Pradesh together hold 26% equity in this venture. Balance 74% is held by the strategic partner, i.e. consortium consisting of M/s. GMR Enterprises and Malaysian Airports Holding Berhard (MAHB).

AIR INDIA

At the end of 1947, Air India submitted a plan to the Government for the formation of Air India International Limited with Government participation to operate international services. The plan was approved and Air India International launched its first service to London via Cairo and Geneva on 8th June 1984 with Constellation aircraft. In 1952, the Planning Commission recommended the nationalization of air transport industry, which was effected on 1st August, 1953, with the creation of two nationalized corporations—Air India International Limited which retained its identity and international flag carrier status, and Indian Airlines, to operate domestic services. On 1st May 1992, Air India Limited was incorporated as a public limited company under the Companies Act, 1956 with the main object of succeeding the undertaking of Air India. The undertaking of Air India was transferred to and vested

in Air India Limited with effect from 1st March 1994 in pursuance of the Air Corporations (Transfer of Undertakings and Repeal) Act, 1994.

Fleet : The fleet of the Company, as on date, consist of the following:

Owned Aircraft	Dry Leased aircraft	Wet Leased aircraft
16	15	5

Air India Ltd. has signed an agreement with Boeing Company for the purchase of 68 aircraft comprising 8XB777-200LR, 15XB777-300ER and 27XB787-8 all powered with GE engines for Air India and 18XB737-800W all powered with CFM engines for Air India Charters Limited (a subsidiary of Air India). The net project cost of 68 aircraft to be acquired by Air India is estimated to be Rs. 34,615 crores.

The delivery schedule of 50 Aircraft of Air India and 18 aircraft of Air India Charters is as under:

Air India	B777-200LR	8	June 2007 through June 2009
	B777-30ER	15	June 2007 through August 2011
	B787-8	27	Sept. 2008 through Oct. 2011
AICL	B737-800	18	Dec. 2006 through Oct. 2009

Air India charters have already taken the delivery of seven aircraft on 30.11.2006, 28.12.2006, 9.01.2007, 16.01.2007, 22.01.2007, 14.02.2007 and 21.05.2007 respectively.

Subsidiaries : Air India has four subsidiary companies, viz. Hotel Corporation of India Ltd. (HCI), Air India Charters Ltd. (AICL), Air India Air Transport Services Ltd. (AIATSL), and Air India Engineering Services Ltd (AIESL).

(i) HCI : The Hotel Corporation of India Limited (HCI) is a Public Limited Company wholly owned by Air India Limited and was incorporated on July 8, 1971 under the Companies Act, 1956 when Air India decided to enter the Hotel Industry in keeping with the then prevalent trend among world airlines. The objective was to offer to the passengers a better product, both at the international airports and at other places of tourist interest, thereby also increasing tourism to India. However, in 2002-2003, three properties of HCI, viz. Indo-Hokke Hotel Limited (Centaur Hotel, Rajgir), Centaur Hotel, Juhu Beach and Centaur Hotel, Mumbai airport were sold off. The remaining units of HCI are Centaur Hotel, Delhi Airport, Centaur Hotel, Lakeview, Srinagar and Flight Kitchens at Delhi and Mumbai.

(ii) AICL-AIR INDIA EXPRESS : Presently, Air India Express has a fleet of seven leased and six owned B737-800 aircraft. Commencing with 26 Kerala / Gulf flights, Air India Express operations have grown and new routes have been added to the network. Currently, 57 international flights are operated on different routes. In addition, Air India Express operates five weekly flights on the Chennai / Kuala Lumpur Sector on behalf of Air India. Effective from 11 January 2007, Air India flights between India and Bahrain / Doha are being operated by Air India Express. Effective Summer '07, with the fleet expansion, it is anticipated that Air India Express will operate approximately 130 flights per week. New cities such as Thiruchirapally, Jaipur, Lucknow, Hyderabad and Kolkata are likely to be added to the network. In addition, frequencies on some of the existing routes may be increased in response to market requirements.

INDIAN AIRLINES

Indian Airlines was set up under the Air Corporations Act, 1953 with an initial capital of Rs. 3.25 crore with its Corporate Headquarters at Delhi. The undertaking of Indian Airlines was transferred to and vested in Indian Airlines Limited with effect from 1 March 1994 in pursuance of the Air Corporations (Transfer of Undertakings and Repeal) Act, 1994.

Indian Airlines is the major domestic air carrier of the country. Indian Airlines operates to 54 domestic stations along with its wholly owned subsidiary Airlines Allied Services Ltd. (Alliance Air). Besides, Indian Airlines also operates to 18 international stations.

The Indian Airlines presently has a fleet of 73 aircraft comprising 03 Airbus A-300s, 48 Airbus A-320s, one A321, 06 Airbus A-319s, 11 Boeing 737s, 02 Dornier DO-228 and 04 ATR-42-320 leased. All B-737 and ATR aircraft are operated by Alliance Air.

The Government approved on 29 September 2005 the proposal of Indian Airlines Limited for acquisition of 43 aircraft comprising 19 A319, 4 A320 and 20 A321 all powered with CFM-56-B engines from Airbus. The first of these aircraft, an A319 was delivered in October 2006 and one A321 was delivered in July 2007. The remaining 41 aircraft are expected to be delivered from August 2007 to April 2010.

ALLIANCE AIR

Alliance Air was set up on 15.4.1996 as a separate company envisioned to function as profit centre of Indian Airlines Limited to effectively utilise the Boeing 737 aircraft fleet and to improve productivity and profitability of Indian Airlines Ltd. and wherever considered essential to be supplemented by Alliance Air.

Alliance Air has taken on lease 4 ATR-42 aircraft and commenced scheduled operations in the North-East region with effect from 2.1.2003. These aircraft have been deployed exclusively in the North-East region in terms of MOU with the North-Eastern Council. In return, a budgetary support of Rs.175 crore is being provided over a period of five years (annual budget of Rs.35 crore) by the NEC during the 10th Five Year Plan. Throughout the period of this MOU, North-Eastern Council is required to facilitate Alliance Air in obtaining concessions on ATF, landing RNFC rates, etc., wherever available. The MOU is effective from the financial year 2002-03 for a period of five years, which has now been extended for another one year i.e. till December 2008. Besides the ATR aircraft, Alliance Air operates B 737-200 aircraft on various regional / trunk routes.

THE MERGER OF AIR INDIA AND INDIAN AIRLINES

The Cabinet in its meeting held on 1st March 2007 approved the proposal to merge Indian Airlines and Air India. Air India and Indian Airlines with their respective international and domestic network have a significant potential for achieving synergy. It has been observed that most major international carriers have grown by ensuring seamless connectivity between international and domestic networks to build extensive access. It is, therefore, felt that the integration of the two airlines could lead to developing seamless connectivity network of regional operations, short to medium haul trunk operations and long haul operations which will lead to an improved product through increased network coverage. Their merger could also provide significant synergy for procurement, sales and distribution besides affording

an opportunity for financial restructuring / strengthening by leveraging common assets. Further, the merger may result in creation of a much bigger airline, as compared to nearest domestic competition, with dominance in domestic / international market position.

Accordingly, a new company, viz. National Aviation Company of India Limited (NACIL) has been incorporated on 30th March 2007 with its Headquarters at Mumbai. The brand name of the new airlines will be Air India and its logo will be Maharaja. The technical and procedural formalities for merger including integration of mapower are underway and it is hoped that the new company will start functioning shortly even as the merger process may continue for another 18-24 months.

PAWAN HANS HELICOPTERS LIMITED (PHHL)

Pawan Hans Helicopters Ltd. (PHHL) an ISO 9001:2000 certified company, is one of India's leading helicopter companies and is known for its reliable helicopter operations. The company was incorporated in 1985 with the objective of providing helicopter services to the petroleum sector, linking inaccessible areas of the country and operating charters for promotion of tourism.

Since its inception, the company has operated a number of helicopters by offering wide range of services to its clients through well balanced fleet of 34 helicopters consisting of Bell 206L4, Bell 407, Dauphin SA 365N, Dauphin AS 365N3 and Mi-172. In addition to this, Pawan Hans is also acquiring two new Dauphin N3 helicopters and delivery of these helicopters would be in September / October, 2007.

Pawan Hans is a leader in providing offshore helicopter support in India. Its helicopters fly under a variety of conditions for carrying out ONGC tasks at Bombay High and Hardy Exploration at Chennai. The company has a strong presence in the North-East having its helicopters deployed in the States of Arunachal Pradesh, Meghalaya, Sikkim and Tripura. Regular passenger services are being run under the aegis of these State governments. A helicopter has also been provided to Ministry of Home Affairs in North-East for VIP transportation.

The company has provided helicopters to Andaman & Nicobar Islands and Lakshadweep Islands for inter-island helicopter services. It also meets the requirements of Govt. of Punjab (VIP transportation) and PSUs such as GAIL for pipelines surveillance.

INDIRA GANDHI RASHTRIYA URAN AKADEMI

The Indira Gandhi Rashtriya Uran Akademi located at Fursatganj (UP) is an autonomous body under Govt. of India, Ministry of Civil Aviation. The Akademi has been established to train pilots to achieve higher standards in flying and ground training. The Akademi is equipped with modern and sophisticated trainer aircraft, flight simulators, computer-based training system (CBT), own ATC, runway with modern navigational and landing aids like DVOR / DME & ILS and own airspace. It has various audio-visual training aids and other facilities for imparting effective flying and ground training by the most qualified personnel. Flying training is conducted on Trinidad TB-20 single engine and King Air C-90A twin-engine turbo-prop executive class aircraft, fitted with modern instruments and avionics. Ab-initio to Commercial Pilots Licence (CPL), PPL to CPL courses with multi-engine aircraft endorsement and Instrument Rating are conducted on a regular basis. Opportunity is also provided to the students to pursue B.Sc. (Aviation) Degree from CSJM

University, Kanpur currently with CPL. The Akademi has trained 458 Fixed Wing pilots and 20 Rotary Wing pilots of Indian and foreign origin till now. Refresher training to 243 Flight Instructors from various flying clubs / training institutes of the country has also been imparted. It has trained 178 non-institutional pilots on multi-engine endorsement.

In addition to the above, the following modernization of facilities is also envisaged in IGRUA:

(a) To increase the capacity of the Akademi to train 100 cadets a year compared to current capacity of 40 yer year.

(b) Induction of 10 more basic training aircraft and one twin engine aircraft.

(c) To enhance and modernize the total training facilities with updated course material.

(d) Re-carpeting of runway, grading of basic strip and dranage improvement, simple approach lighting, extension of apron and taxi track, construction of hangar for housing the aircraft.

(e) To enhance the capacity of hostel accommodation, residential accommodation for operational staff and additional office building, power generation capacity, and sewerage treatment plant.

(f) To induct more operational / technical personnel.

Flying Training School at Gondia

Ministry of Civil Aviation propose to establish a premier pilot training institute at Gondia, Maharashtra to augment the ongoing efforts of flying training schools for increasing the number of qualified and well-trained pilots, to tackle the huge demand for pilots in the industry. Airports Authority of India (AAI) has taken over land measuring 405.92 hectares from the State Government, for this purpose. It has been decided that the new Flying Training School would eventually be a joint venture project with the participation of all stakeholders. AAI would have an equity participation of 49% which can be shared amongst the other aviation related PSUs. AAI is in the process of finalization of JV partner and "Expression of Interest" (EOI) has been invited.

COMMISSION OF RAILWAY SAFETY

The Commission of Railway Safety deals with matters pertaining to safety in rail travel and operation, and for this purpose performs statutory functions as laid down in the Railways Act, 1989 and the rules framed thereunder. Formerly called the Railway Inspectorate, it functioned under the control of the Railway Board till May 1941 when the Inspectorate was separated from the control of Railway Board to secure its independence from the authority administering the Railways. This separation was carried out pursuant to the recommendations of a Committee called the 'Pacific Locomotive Committee', which was endorsed by the Central Legislature. After its separation, the Inspectorate was attached to the Air Wing and placed under Department of Communications. It came under the administrative control of the Ministry of Tourism and Civil Aviation in May 1967, presently the Ministry of Civil Aviation.

The main task of the Commission is to direct, advise and caution the railway executive through its inspectional, investigatory and advisory functions and thereby

assist them in ensuring that all stipulated measures are taken in regard to the soundness of rail construction and safety in train operation.

The Commission is headed by the Chief Commissioner of Railway Safety who is also the Principal Technical Adviser to the Government of India in all matters pertaining to rail safety. The headquarters of the Commission are located at Lucknow. The Chief Commissioner directs the technical activities of the Commission and issues instructions for the guidance of Commissioners of Railway Safety in respect of holding statutory inquiries into serious railway accidents, inspection of new lines including electrification of existing lines prior to their opening for public carriage of passengers and sanction for running of new locomotives/rolling stock. The Commission has 9 circle offices, viz. two with headquarters at Mumbai, three with headquarters at Kolkata and one each with headquarters at Bangalore, New Delhi, Lucknow and Secunderabad. Each circle office is under the charge of a Commissioner.

TOURISM

Tourism has emerged as an instrument for employment generation, poverty alleviation and sustainable human development. During 2003-2004, direct employment in the tourism sector was estimated to be 21.54 million. Tourism also promotes national integration and international understanding and gives support to local handicrafts and cultural activities.

Tourism in India has grown substantially over the last three decades. Foreign tourist arrivals in India recorded an increase of 13.2 per cent during the year 2005 as compared to the year 2004. India's share in the world tourism market during the year 2005 was 0.49 per cent, as against 0.44 per cent in 2004. Foreign exchange earnings during the year 2005 were Rs. 25,172 crores as against Rs.21,828 crores in 2004.

Domestic tourism plays a vital role in achieving the national objectives of promoting social and cultural cohesion and national integration. Its contribution to generation of employment is very high. With the increase in income levels and emergence of a powerful middle class, the potential for domestic tourism has grown substantially during the last few years. During the year 2004, about 366 million domestic tourist visits were made and for the year 2005 it was estimated at 382 million visits.

ORGANISATIONS

The organisations involved in the development of tourism at the Centre are Ministry of Tourism, Indian Institute of Tourism and Travel Management, National Council for Hotel Management and Catering Technology, India Tourism Development Corporation Limited, Indian Institute of Skiing and Mountaineering and National Institute of Water Sports.

The Ministry of Tourism is responsible for formulation and implementation of policies and programmes for the development of tourism within the country and for attracting foreign tourists to India by way of developing tourism infrastructure, publicity and promotion, dissemination of information, co-ordination and supervision of activities of various segments of industry such as hotels, travel agencies, tour operators, etc.

There are 20 field offices of the Ministry of Tourism in India and 13 in other countries to undertake both developmental and promotional activities. While the overseas offices are in constant contact with tourists, travel intermediaries and media to promote tourism in India, the field offices in India provide facilitation services to tourists and co-ordinate with the State Governments on tourism infrastructural development. The main objectives of the overseas tourist offices are to position India in the tourism generating markets as a preferred tourism destination, to promote various Indian tourism products vis-à-vis competition faced from various destinations and to increase India's share of the global tourism market. These objectives are met through an integrated marketing strategy and synergised promotional activities undertaken in association with the Travel Trade and State Governments.

INDIA TOURISM DEVELOPMENT CORPORATION LIMITED

India Tourism Development Corporation (ITDC) came into existence in October 1966 with the objective of developing and expanding tourism infrastructure in the country and thereby promoting India as a tourist destination. Working on the philosophy of public sector, ITDC succeeded in achieving its objectives by promoting the largest hotel chain in India and providing all tourist services, i.e. accommodation, catering, transport, in-house travel agency, duty free shopping, entertainment, publicity, consultany, etc., under a single window. It also offers consultancy services from concept to commissioning in the tourism field both for private as well as public sector.

In pursuance of the disinvestment policy of the Government, 18 hotels have been disinvested. Keeping in view the changed scenario, the Corporation has suitably been restructured so that it continues to fulfil its original mandate for tourism development in the country. Besides consolidating and expanding its existing business areas, ITDC has made diversification into new avenues / innovative services like full-fledged money changer services and Western Union Money Transfer, Training Consultancy in hospitality sector, event management and consultancy and execution of tourism and engineering projects.

ITDC has been a pioneering tourism organisation which provides all the tourist services / facilities under one roof. ITDC's present network consists of 8 Ashok Group Hotels, 7 joint venture hotels including one under construction, two restaurants (including one Airport Restaurant), 13 transport units, 1 tourist service station, 37 duty free shops at international as well as domestic custom airports, one tax free outlet, one Sound & Light Show and four catering outlets. Besides, ITDC is also managing a hotel at Bharatpur and a Tourist Complex at Kosi and a S&L show at Sabarmati, Ahmedabad owned by the Department of Tourism.

The Ashok International Trade Division of ITDC offers world class duty free shopping facilities to international travellers at its 38 outlets, earning crucial foreign exchange for the country and showcasing Indian products to the world.

The Ashok Travels and Tours (ATT) handles work relating to domestic / international ticketing, hotel booking and tour packages, car and coach rentals, money changing services, money transfer services, overseas insurance and organising exhibitions.

The Ashok Reservation and Marketing Services (ARMS) Division of ITDC, which is mainly responsible for marketing of Ashok Group of Hotels, participated

in national / international events like ITB Berlin to ensure direct interaction with Foreign Tour Operators to promote various services of ITDC.

The Ashok Institute of Hospitality & Tourism Management (AIH&TM) of ITDC has been associated with the pioneering efforts in human resource development for more than three decades. Awarded the ISO-9001-2000 Certification, the institute conducts 18 months Craft / Certificate courses in the field of Culinary Skill Development, besides providing training to management trainees / apprentices and organising Executive Development programmes for the officials of ITDC. Under an MOU signed with the prestigious Kurukshetra University, the AIH&TM started 4-year Bachelors' Degree Course in International Hospitality Business Management from August 2004.

HOTEL MANAGEMENT AND FOOD CRAFT INSTITUTES

The Ministry of Tourism has accorded high priority to the development of manpower to meet the growing needs of hotels, restaurants and other hospitality-based industries. For this purpose, 21 institutes of hotel management and catering technology and 10 food craft Institutes (3 of these are now also State IHMS) have been set up in the country. In addition to the above, four more institutes of hotel management are in the pipeline in Uttaranchal (Dehradun), Jharkhand (Jamshedpur), Chhattisgarh (Raipur) and Haryana (Kurukshetra). These Institutes conduct degree courses in the fields of hotel management, catering technology and applied nutrition and craft courses in food and beverage services, accommodation operations, dietetics and hospital food service, food production and patisserie, house keeping, front office, etc. IHMs' at Mumbai, Bangalore and Pusa (New Delhi) have started 2 Years M.Sc. Hospitality courses also. Food Craft Institutes conduct Craft Courses for durations ranging from six months to one year for operational staff. All these training institutes are affiliated to the National Council for Hotel Management, Catering Technology and Applied Nutrition (NCHMCT) at apex level which regulates academics for all these institutes.

INDIAN INSTITUTE OF TOURISM AND TRAVEL MANAGEMENT

The Indian Institute of Tourism and Travel Management (IITTM) located in Gwalior is an autonomous body set up to provide education in tourism and travel management and to meet the demands of professionally trained people in the tourism industry. The Institute offers Bachelor's degree in Tourism Management, MBA and Post-Graduate Diploma in Tourism Management courses. The Institute also organizes Executive Development Programmes, seminars and workshops related to tourism and travel management.

Capacity Building for Service Providers (CBSP) : In the year 2002, the Ministry launched a programme called CBSP to train the persons engaged in small hotels, dhabas, eating joints, restaurants, etc., and also handling tourists like Immigration staff, airport staff, security / Police personnel, guides, taxi operators, bus drivers, etc. The objective was to provide short term training to improve their etiquette, behaviour and attitude towards tourists.

The scope of this scheme has been further enlarged and the training programmes of 3 / 6 months duration have been added for skill development of existing as well as fresh service providers. Under this scheme, a new programme called 'Project Priyadarshini' was also launched in 2005 aimed at imparting training

to women in taxi driving / operation, entrepreneurship like setting up souvenir kiosks, etc, to adopt tourism as their profession.

National Institute of Water Sports, Goa : The Ministry of Tourism set up the National Institute of Water Sports (NIWS) as training-cum-resource centre for the Water Sports Tourism Industry at Goa. The NIWS conducts and facilitates courses in various activities like sailing, scuba diving, skiing, etc. The Institute also acts as a nodal centre for water sports-oriented tourism activities in the country.

HOTEL ACCOMMODATION

The hotel sector forms one of the most important segments of the tourism industry with high potential for employment generation and foreign exchange earnings. To give impetus to this sector, the government provides concessions under EXIM Policy and other incentives. The Industrial Policy has now placed hotels and tourism related activities as a priority industry. Foreign investment and collaborations are now facilitated under the new economic policy. Automatic approval is available for foreign direct investment upto 100 per cent in hotel and tourism sector.

CLASSIFICATION OF HOTELS UNDER THE STAR SYSTEM

The Department of Tourism classifies functioning hotels under the star system into various categories from one to five-star deluxe, and Heritage (Heritage, Classic, Grand and Heritage Renaissance) and Apartment Hotels from three star to five-star deluxe, Time Share Resorts from three star to five-star and Guest Houses. The Department also reclassifies these hotels after every five years to ensure that requisite standards are maintained by them.

The Hotels and Restaurants Approval and Classification Committee (HRACC) set up for the purpose has representatives drawn from Central Government, State Governments and hotel and travel industry associations.

HERITAGE HOTELS

A special category for classification of heritage hotels has been introduced to cover functioning hotels in palaces, havelies, castles, forts and residences built prior to 1950. As the traditional structure reflects the ambience and lifestyle of the bygone era and is immensely popular with the tourists, the scheme is aimed to bring such properties into the approved sector and this ensures that such properties, landmarks of India's heritage are not lost due to decay and disuse.

TRAVEL TRADE

The Department of Tourism has a scheme of approving travel agents, tour operators, adventure tour operators and tourist transport operators. During 2005, keeping in view the spurt in domestic tourism, a new category for the recognition of domestic tour operators has been introduced. The aims and objectives of this schemes are to encourage quality, standard and better services in these categories so as to promote tourism in India. The Travel Trade Division also interacts with the travel trade associations like Travel Agents Association of India (TAAI), Indian Association of Tour Operators (IATO), Indian Tourist Transport Operators Associations,(ITTA), etc., and other agencies like India Convention Promotion Bureau, Pacific Asia Travel Association (PATA), etc.

The Travel Trade Division also deals with all matters pertaining to the regulation and training of tourist guides at Regional level and also co-ordinates

with other Ministries such as Civil Aviation, Culture, Railways, Surface Transport, External Affairs and Home Affairs on various issues to improve the facilities for the tourists visiting various destinations in India.

CELEBRATION OF VARIOUS TOURISM EVENTS

A number of events and road shows have been organised during 2005-06 for spreading awareness about India Tourism in domestic and international tourism market to attract more tourists to India. The major events organised by the Ministry in collaboration with various State Tourism Departments are Golf Open Tournament, Srinagar; Sindhu Darshan at Leh; Heritage Festival, New Delhi; All India Crafts Mela, Hyderabad; Heritage International Festival, Jaipur; India International Boat Show, Kochi; Paragliding Show and Tourism Conclave in Himachal Pradesh; Mega Folk Festival "Virasat" in Dehradun; Prithivi 05-Global Eco-Meet, Kochi; Domestic and International Photo Exhibition "A Confluence of Cultures" and Essay and Photographic competition on "What Tourism Means To Me" on World Tourism Day on 27 September (every year); India National Tourism Day on 17 March 2006; Designer's Night Bazar, Surajkund Crafts Mela, Haryana; 3 Global Interline Golf Championship, Photo Exhibition, Eco-Tourism Marketing Meet; Mussorie (Uttaranchal), WTTC, Himalayan Run and Trek and Photo Exhibition on Hindu, Buddhist and Islamic monuments of Kashmir.

The Ministry of Tourism also participated in various travel and tourism events, trade fairs and exhibitions in India and abroad. The important fairs and exhibitions are Tourism Travel Fair in New Delhi, Mumbai, Bangalore, Chennai and SATTE (South Asia Tourism and Travel Expo), New Delhi. India Tourism offices located in 20 cities in India also participated at local important fairs. The Ministry of Tourism participated in several overseas travel and tourism trade fairs, notably World Travel Market, London; ITB (International Tourism Bourse), Berlin; Arabian Travel Market (ATM), Dubai; EIBTM, Spain; IMEX, Frankfurt; Pata Travel Mart, Malaysia; FITUR, Spain; and World Travel Fair, Shanghai. India Tourism offices located in 13 overseas cities also participated in various travel and tourism fairs.

National Tourism Policy 2002 : A National Tourism Policy-2002 was announced by the Government which, inter-alia attempts to position India as a global brand to take advantage of the burgeoning global travel and trade and the vast untapped potential of India as a destination.

Tourism in 10th Five Year Plan : In order to further accelerate the development of tourism in the country, the thrusts during the 10th Five Year Plan has been to : i) position tourism as a major engine of economic growth; ii) harness the direct and multiplier effects of tourism for employment generation and economic development; (iii) provide impetus to rural tourism; iv) provide a major thrust to domestic tourism which will act as a spring board for growth and expansion of international tourism; v) position India as a global brand to take advantage of the burgeoning global travel and trade and the vast untapped potential of India as a destination; vi) acknowledge the critical role of private sector with government working as an active facilitator and catalyst; vii) create and develop integrated tourism circuits based on India's unique civilisation, heritage and culture in partnership with states, private sector and other agencies; viii) and ensure that the tourist to India gets physically invigorated, mentally rejuvenated, culturally enriched, spiritually elevated and "feels India within him".

26 Water Resources

WATER RESOURCES

The Ministry of Water Resources lays down policies and programmes for development and regulation of the country's water resources. It covers sectoral planning, coordination, policy guidelines, technical examination and techno-economic appraisal of projects, providing central assistance to specific projects, facilitation of external assistance and assistance in the resolution of inter-state water disputes, policy formulation, planning and guidance in respect of minor irrigation, command area development and development of ground water resources, etc.

The National Water Policy, 2002 lays emphasis on the integrated water resources development and management for optimal and sustainable utilization of the available surface and groundwater; creation of well-developed information system; water conservation and demand management; quantity and quality aspects as well as environmental considerations; involvement of beneficiaries and stakeholders in the project planning and participatory approach in water resources management; adequate training and research; resettlement & rehabilitation aspects of project affected persons. The Policy also envisages Private Sector Participation.

WATER RESOURCES POTENTIAL

The average annual water availability of the country is assessed as 1869 billion cubic metres (BCM). Of this, total utilizable water resource is assessed as 1123 BCM, surface water 690 BCM and ground water as 433 BCM.

IRRIGATION POTENTIAL

Expansion of irrigation facilities, along with consolidation of the existing systems, has been the core strategy for increasing food production in the country. The irrigation potential through major, medium and minor irrigation projects has increased from 22.6 million hectares (mha) in 1951, to about 102.77 mha at the end of 2006-07. Plan-wise irrigation potential created and utilized through major, medium and minor irrigation projects in the country is as indicated hereunder:

TABLE 26.1 : PLANWISE POSITION OF IRRIGATION POTENTIAL

Plan Period	Potential (cumulative) created (Mha)	Potential (cumulative) utilised (Mha)
Pre-Plan period	22.60	22.60
First Plan (1951-56)	26.26	25.04
Second Plan (1956-61)	29.08	27.80
Third Plan (1961-66)	33.57	32.17
Annual Plans (1966-69)	37.10	35.75
Fourth Plan (1969-74)	44.20	42.19
Fifth Plan (1974-78)	52.02	48.46
Annual Plans (1978-80)	56.61	52.64

Sixth Plan (1980-85)	65.22	58.82
Seventh Plan (1985-90)	76.53	68.59
Annual Plans (1990-92)	81.09	72.86
Eighth Plan (1992-97)	86.26	77.24
Ninth Plan (1997-2002)	93.95	80.06
Tenth Plan (2002-2007)	102.77	86.29

MAJOR AND MEDIUM IRRIGATION PROJECTS

Irrigation projects with a Culturable Command Area (CCA) between 2,000 and 10,000 hectares are classified as medium projects and those with CCA of more than 10,000 hectares as major projects. The expenditure incurred on major and medium projects and the irrigation potential created during various plan periods is given below:

TABLE 26.2 : MAJOR AND MEDIUM IRRIGATION PROJECTS (EXPENDITURE INCURRED AND POTENTIAL CREATED)

Period	Outlay / expenditure (Rs crore)	Potential created (mha)	Cumulative (mha)
Pre-Plan period	-	9.70	9.70
First Plan (1951-56)	376	2.50	12.20
Second Plan (1956-61)	380	2.13	14.33
Third Plan (1961-66)	576	2.24	16.57
Annual Plans (1966-69)	430	1.53	18.10
Fourth Plan (1969-74)	1,242	2.60	20.70
Fifth Plan (1974-78)	2,516	4.02	24.72
Annual Plans (1978-80)	2,079	1.89	26.61
Sixth Plan (1980-85)	7,369	1.09	27.70
Seventh Plan (1985-90)	11,107	2.22	29.92
Annual Plans (1990-92)	5,459	0.82	30.74
Eighth Plan (1992-97)	21,669	2.22	32.95
Ninth Plan (1997-2002)	42,968	4.10	37.06
Tenth Plan (2002-2007)	82291*	5.30**	42.35

· Including revised outlay for 2004-05 and approved outlay for 2005-06 and 2006-07.

** Including targets for 2006-07.

ACCELERATED IRRIGATION BENEFITS PROGRAMME

The Accelerated Irrigation Benefits Programme (AIBP) was launched during 1996-97 to give loan assistance to the States to help them complete some of the incomplete major / medium irrigation projects, which were in advanced stages of completion. The Surface Minor Irrigation Schemes of North-Eastern States, Hill States of Sikkim, Uttaranchal, Jammu and Kashmir, Himachal Pradesh and KBK Districts of Orissa have also been provided Central Loan Assistance(CLA) under this programme since

1999-2000. Grant component has also been introduced in the programme from April 2004. As per existing AIBP criteria effective from December 2006, grant equal to 25% of the project cost for major and medium irrigation projects in non-special category States, 90% for major / medium / minor irrigation projects in special category States are provided to the selected projects. KBK districts of Orissa are treated at par with special category States. The minor irrigation schemes in non-special category States falling in drought prone, tribal and flood prone areas are treated at par with special category States and are also given 90% grant of the project cost. The State Governments have been provided an amount of Rs.21739.8559 crore as Central Loan Assistance / Grant under AIBP upto 31st March, 2007 since inception of this programme covering 229 major / medium irrigation projects and 6205 Surface Minor Irrigation Schemes. Statewise details of Central Loan Assistance / Grant released under AIBP are given in the Table. After commencement of this Programme 91 major / medium and 4418 Surface MI Schemes have so far been completed. An additional irrigation potential of 4.634 million hectare has been created through major / medium irrigation projects and an irrigation potential of 0.152 million hectare has been created through Surface MI Schemes upto March, 2007.

HYDROLOGY PROJECT

Hydrology Project (Phase-I) was implemented with World Bank assistance of SDR 75.1 million under the credit agreement with Government of India. The Government of Netherlands provided grant-in-aid of Euro 14.64 million in the form of technical assistance under a bilateral Indo-Dutch agreement.

The Project was implemented in nine states viz. Andhra Pradesh, Chhattisgarh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa and Tamil Nadu and six Central agencies viz. Ministry of Water Resources, Central Water Commission, Central Ground Water Board, Delhi, India Meteorological Department, Central Water & Power Research Station, Pune and National Institute of Hydrology, Roorkee. The project enabled establishment of functional Hydrological Information System (HIS) and improved institutional capacity of implementing agencies to build, operate and utilize the HIS for the benefit of different user groups. The databases developed under the project would support major aspects of National Water Policy, particularly with regard to water allocation, planning and management of water resources development at the national, state, basin and project level. To realize its objectives, the Hydrology Project provided support for upgrading and expanding physical infrastructure for all aspects of data viz. collection, collation, processing, storage and dissemination; provision of equipment and material; Institutional strengthening including technical assistance, training infrastructure such as buildings, laboratories, computer hardware and incremental operating and maintenance costs.

The total expenditure was Rs.605.28 crore at the closing of the project as on 31st December, 2003.

Hydrology Project Phase-II was launched w.e.f. 5th April, 2006. The objectives of this project are to extend and promote the sustained and effective use of Hydrological Information System (HIS) by all potential users concerned with water resources planning and management, both public and private, thereby contributing to improved productivity and cost-effectiveness of water related investments in 13 states viz. Andhra Pradesh, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Kerala, Maharashtra, Orissa, Tamil Nadu, Goa, Punjab, Puducherry and Himachal

STATEWISE DETAILS OF CENTRAL LOAN ASSISTANCE/GRANT RELEASED UNDER AIBP

(Rs. Crore)

Sl. No.	State	Amount												Grand Total
		1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04		2005-06	2006-07	2007-08	
										Loan/Grant (Total)	Grant	Grant	Grant	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Andhra Pradesh	35.2500	74.0000	79.6700	65.0150	95.0200	281.6600	33.1860	205.5300	87.5470	311.3815	843.4220	80.6900	2192.3715
2	Arunachal Pradesh	0.0000	0.0000	0.0000	7.5000	7.5000	15.0000	1.5000	20.0000	10.0000	18.0000	27.0000		106.5000
3	Assam	5.2300	12.4000	13.9500	14.5400	24.0770	14.5210	16.2738	19.2015	16.9300	34.9332	30.2685	13.9000	216.2250
4	Bihar	13.5000	5.1500	36.1850	129.6950	151.7750	3.4200	14.4805	74.6440	37.2150	16.2380	3.2300	30.9700	516.5025
5	Chhattisgarh	0.0000	4.5000	9.5000	10.5200	13.9300	48.2000	104.0000	74.6300	2.9250	7.6645	10.7050	30.6100	317.1845
6	Goa	0.0000	5.2500	0.0000	3.5000	61.6500	58.0000	0.0000	2.0000	0.6500		1.9100	18.3400	151.3000
7	Gujarat	74.7730	196.9000	423.8200	272.7000	421.8500	581.6900	1000.3300	650.3590	530.5000	339.6000	121.8885	162.4200	4776.8305
8	Haryana	32.5000	12.0000	0.0000	0.0000	0.0000	0.0000	18.0000	7.7350	11.1350	6.0000	3.1700		90.5400
9	Himachal Pradesh	0.0000	6.5000	5.0000	11.0470	18.0150	3.2440	8.1500	14.6920	3.6900	30.0785	3.9300	37.6200	141.9665
10	Jammu & Kashmir	1.3000	0.0000	0.0000	4.6800	10.4600	11.0700	34.9990	21.5450	12.7445	36.6878	37.7716	39.3000	210.5579
11	Jharkhand	0.0000	8.8900	11.6400	14.3450	5.7150	10.8200	9.6700	1.8330	21.2850	5.0370	1.2900	3.7100	94.2350
12	Karnataka	61.2500	90.5000	94.5000	157.1400	171.0000	492.5000	620.8500	266.4780	396.2952	140.7759	160.3729	193.8600	2845.5220
13	Kerala	3.7500	15.0000	0.0000	0.0000	22.4000	11.2750	5.6650	31.0000	49.4400	9.3591	16.6468		164.5359
14	Madhya Pradesh	63.2500	110.0000	81.2500	95.3250	151.3280	215.4100	220.0000	568.4400	516.7010	168.0966	48.3100	229.1200	2467.2306
15	Maharashtra	14.0000	55.0000	50.8600	49.8750	97.0200	39.1000	133.1341	164.3950	529.2860	167.3822	465.5213	234.8000	2000.3736
16	Manipur	4.3000	26.0000	10.7800	21.8100	1.5000	9.3600	19.5000	15.5000	13.0000	75.7035	156.3042		353.7577
17	Meghalaya	0.0000	0.0000	0.0000	2.6938	5.5120	4.4700	1.5000	1.0880	1.7438	1.5750	0.7500		19.3326

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
18	Mizoram	0.0000	0.0000	0.0000	1.4330	1.4330	2.0000	0.7500	9.3000	5.0000	9.3150	14.2354	5.2600	48.7264
19	Nagaland	0.0000	0.0000	0.0000	2.7300	5.0000	5.0000	2.6590	8.0000	4.0000	7.9987	10.5995	4.0600	50.0472
20	Orissa	48.4500	85.0000	71.5000	90.2500	100.3200	168.4750	179.5700	154.6850	24.2230	151.3742	133.8846	173.5800	1381.3118
21	Punjab	67.5000	100.0000	0.0000	42.0000	55.6200	113.6900	36.6600	0.0000		26.3166			441.7866
22	Rajasthan	2.6750	42.0000	140.0500	106.6650	78.4670	96.3150	174.3850	499.8370	352.9040	90.2952	11.6000	100.2600	1695.4532
23	Sikkim	0.0000	0.0000	0.0000	1.3600	0.0000	2.4000	0.7500	0.7500	0.7500	0.9113	3.3236		10.2449
24	Tripura	3.7730	5.1000	3.9750	34.6530	13.8830	21.0630	13.3947	13.3769	11.0000	31.9950	22.5131		174.7267
25	Tamil Nadu	20.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					20.0000
26	Uttar Pradesh	43.5000	78.0000	76.5000	286.0000	315.9000	354.6900	359.0000	274.7850	175.9200	133.1280	81.8954	80.9400	2260.2584
27	Uttaranchal	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	25.1625	25.5525	38.9917	80.4387	84.7298	52.5700	307.4452
28	West Bengal	5.0000	20.0000	10.0000	25.0000	26.8250	38.6080	28.1330	3.1440	13.4610	0.0287	6.7000		176.8997
Total		500.0010	952.1900	1119.1800	1450.4768	1856.2000	2601.9810	3061.7026	3128.5009	2867.3372	1900.3142	2301.9722	1492.0100	23231.8659

Pradesh and 8 central agencies viz. Central Water Commission, Central Ground Water Board, India Meteorolocial Department, National Institute of Hydrology, Roorkee, Central Water and Power Research Station, Pune, Ministry of Water Resources, Central Pollution Control Board and Bhakra Beas Management Board. The total expenditure to be incurred on the project is Rs. 631.81 crore. The project envisages to develop a Decision Support System for water management & planning and real time reservoir operation. It also envisages development of hydrological design aids for surface water, ground water & water quality and purpose driven studies.

WATER QUALITY ASSESSMENT AUTHORITY (WQAA)

In view of the problems of pollution of national water resources, the Ministry of Environment & Forests, issued the Notification on 22 June, 2001 constituting the "Water Quality Assessment Authority" with effect from 29 May, 2001.

The Ministry of Water Resources is assisting the WQAA in carrying out and coordinating its functions. The Water Quality Review Committees have been constituted in the States with the objective of improving coordination amongst the Central and State agencies, review / assess schemes launched / to be launched to improve quality of water resources, review water quality data analysis and interpretation in order to identify problem areas and develop action plans for improving quality on a sustainable basis, identify hot spots for surveillance / monitoring and to look into other specific miscellaneous issues related to water quality arising from time to time.

Based on the recommendations of Expert Committee and Task Force, a gazette notification on the Uniform Monitoring Protocol for adoption by all the water quality-monitoring agencies has been issued in June, 2005. A Working Group has also been constituted by WQAA to deal with issues relating to minimum flows in riverine systems.

In accordance with the decisions of WQAA, the Water Quality Monitoring Committee (WQMC) was also constituted to assist the WQAA in its functions. WQMC, in turn, constituted 3 Standing Groups to initiate action considering present status and requirement / modality about action to be taken on related functions of WQAA as per the gazette notification.

In order to make State Water Quality Review Committees more effective and to establish co-ordination among various agencies in the field of water quality monitoring, one workshop at national level and four Workshops at regional level, have been organised. A national level workshop on development of Water Quality Management Plan (WQMP) for State Water Quality Review Committees (WQRCs) was organised.

COMMAND AREA DEVELOPMENT & WATER MANAGEMENT PROGRAMME

The Centrally sponsored Command Area Development (CAD) Programme was launched in 1974-75 with the main objectives of improving the utilization of created irrigation potential and optimizing agriculture production and productivity from irrigated agriculture through a multi-disciplinary team under an Area Development Authority.

The CAD programme was initiated with 60 major and medium irrigation projects. So far 314 irrigation projects with a Culturable Command Area (CCA) of

about 28.68 Mha have been included under the programme, out of which 136 projects are currently under implementation.

Based on suggestions received from beneficiaries and implementing agencies and recommendations of the Working Groups of the Planning Commission on 'Command Area Development Programme' and 'private / beneficiary participation in the irrigation management' for tenth plan, the CAD Programme has been restructured and renamed as "Command Area Development and Water Management (CADWM) Programme" from 1st April, 2004.

The Programme involves execution of On-Farm Development (OFD) works like construction of field channels, field drains, reclamation of water logged areas, renovation and rehabilitation of MI tanks and correction of system deficiency above outlets up to distributaries of 4.25 cumec (150 cusec) capacity. The Programme also involves software activities like adaptive trials, demonstration, training of farmers, evaluation studies, etc. Central assistance of 50 per cent (limited to the prescribed cost norms) is provided to the State Governments for construction activities and of 75 per cent for the software activities. Warabandi or a rotation system of distribution of irrigation water in order to ensure equitable and timely supply of water to all the farm holdings of the command is also a component of the programme.

The National Water Policy-2002 stresses participatory approach in water resources management. It has been recognized that participation of beneficiaries will help greatly for the optimal upkeep of irrigation system and utilization of irrigation water. The participation of farmers in the management of irrigation would give responsibility for operation and maintenance and collection of water charges from the areas under the jurisdiction of the Water Users' Associations. A one-time functional grant of Rs.600 per ha. to be shared by the Centre, State and farmers at the rate of Rs.270:270:60 respectively is being provided, under the restructured programme. Minimum contribution of 10 per cent for beneficiaries has been made mandatory in the cost of construction of field channels, full package OFD works, reclamation of water logged areas and renovation of MI tanks.

The evaluation made in the past has revealed that the CAD Programme made positive impact on various important indicators, like increase in the irrigated area, productivity and production, irrigation efficiency, etc. Despite best efforts for efficient irrigation water management, the problem of water logging has surfaced in many irrigated commands. Under the component on reclamation of water logged areas, 474 schemes of nine States, namely, Bihar, Gujarat, Madhya Pradesh, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Orissa and Uttar Pradesh have been approved till now at an estimated cost of Rs.51.09 crore for reclamation of 61856 ha. of water logged area. Out of this, an area of about 46668 ha. has been reclaimed by these states up to March 2007. Revamping of the programme for XI plan is also under consideration.

REPAIR, RENOVATION AND RESTORATION OF WATER BODIES

The Government of India sanctioned a Pilot Scheme "National Project for Repair, Renovation and Restoration of Water Bodies directly linked to Agriculture" in January 2005 with an estimated cost of Rs. 300 crore to be shared by Centre and State in the ratio of 3:1 and to be implemented during the remaining period of Xth Plan. The objectives of the scheme are: to restore and augment storage capacities of water bodies, to recover and extend their lost irrigation potential. The water bodies having culturable command area of more than 40 hectares and upto 2000 hectares

were included under the pilot scheme. The Scheme has been approved for 26 district projects in 15 States, namely, Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, West Bengal, Himachal Pradesh, J&K, Gujarat, Kerala and Maharashtra at an estimated cost of Rs. 299.92 crores. These projects cover 1098 water bodies with total original culturable command area of 1.72 lakh hectares. After completion, the scheme will generate an additional irrigation potential of 0.78 lakh hectare works on 691 water bodies in 11 States, which have been completed till date.

The World Bank assisted project of Restoration of Water Bodies was announced by the Hon'ble Finance Minister in his budget speech 2006-07 as an expansion of the Pilot Scheme "National Project for Repair, Renovation and Restoration of Water Bodies directly linked to Agriculture" . Proposals from the states of **Andhra Pradesh, Karnataka, Orissa, West Bengal and Tamil Nadu have been received in the Ministry.**

The project has been conceived as 75% loan by the World Bank to state and 25% central subsidy. The proposals of Andhra Pradesh, Karnataka, Orissa and Tamil Nadu were posed to the World Bank in March, 2006. During 2006-07, the proposal from West Bengal Government for external assistance at a cost of Rs.1142.450 was received and same was also posed to the World Bank in January, 2007.

The World Bank loan agreement with Tamil Nadu has been signed for Rs.2182 crore to restore 5763 water bodies having a CCA of 4 lakh hectares. The World Bank loan agreement with Andhra Pradesh has also been signed for about Rs.835 crores to restore 3000 water bodies with a CCA of 2.5 lakh hectares. The Projects for Karnataka has been negotiated with the World Bank on 24.08.2007. Projects for Orissa and West Bengal are at various stages of appraisal by the World Bank. Proposals from other States for external assistance are also likely to be received in the XIth Plan. It is expected to incur an expenditure of Rs.2500 crores to the extent of 25% of the project cost in each State as Central grant which will be taken as laon from World Bank. Accordingly, a provision of Rs.2500 crores is proposed in the XIth Plan as Central share for projects under external assistance.

FLOOD MANAGEMENT

Out of the country's total geographical area of 329 million hectare, about 40 million hectare is prone to floods. Till March 2007, an area of 18.22 million hectare has been provided with protection against floods by way of construction of embankments, drainage channels, town protection works and raising on platforms.

The Union Government is providing Central assistance to the flood prone States to take up some of the critical works. The Central Government is also providing special assistance to the border and North eastern States for taking up certain priority works.

In order to mitigate the damages from floods, a nation wide Flood Forecasting and Warning System has been established by the Central Water Commission on interstate river basins and flood forecasts are being issued through 175 Stations, out of which 147 are river level forecasting Stations and 28 are inflow forecasting stations on major dams/reservoirs. Forecasts about (i) water levels in rivers likely to be attained as a result of floods and (ii) volume of inflow into reservoirs, are formulated and disseminated to various administrative authorities of Central Government, State Government and District Administration, media and other users on the basis of real time data.

RIVER WATER DISPUTES

Most of the major rivers in India are inter-State rivers and there have been some inter-State disputes on sharing of water. Efforts are being made to facilitate resolution of these disputes through negotiations amongst the basin States. Adjudication with the help of water disputes tribunals is also resorted to as and when warranted.

The mechanism for settlement of water disputes is available in the form of Inter-State River Water Disputes Act, 1956, which provides for settlement of disputes by negotiations failing which referring such disputes to a tribunal for adjudication.

The details of inter-State water disputes under Inter-State River Water Disputes Act (ISRWD), 1956 are as follows:

S.No.	River(s)	States	Date of Constitution of Tribunal	Date of Award
1.	Krishna	Maharashtra, Andhra Pradesh, Karnataka	April 1969	May 1976
2.	Godavari	Maharashtra, Andhra Pradesh, Karnataka, Madhya Pradesh and Orissa	April 1969	July 1980
3.	Narmada	Rajasthan, Madhya Pradesh, Gujarat, Maharashtra	October 1969	December 1979
4.	Cauvery	Kerala, Karnataka, Tamil Nadu and Union Territory of Pondicherry	June 1990	Report u/s 5(2) received. References made by party States and Central Government to the Tribunal under Section 5(3) Report under Section 5(3) awaited.
5.	Krishna	Maharashtra, Andhra Pradesh and Karnataka	April 2004	Report u/s 5(2) pending

In addition to above, request from Government of Goa and Government of Orissa has been received under ISRWRD Act, 1956 for constitution of tribunal in respect of Mahadayi/ Mandovi river and Vamsadhara river respectively. These requests are under consideration of the Central Government.

GROUND WATER DEVELOPMENT IN THE COUNTRY

The total annual replenishable ground water resources of the Country have been reassessed as 433 Billion Cubic Meters (BCM) and the net annual ground water availability is estimated as 399 BCM. Existing gross ground water draft as on March 2004 for all uses is 231 BCM per year. The stage of ground water development is 58%. The development of ground water in different areas of the country has not been uniform. Highly intensive development of ground water in certain areas in the country has resulted in over exploitation leading to decline in the levels of ground water and sea water intrusion in coastal areas. There is a continuous growth in dark and overexploited areas in the country.

As per the latest assessment of ground water resources carried out jointly by the Central Ground Water Board (CGWB) and the States, the assessment units are categorized as 'Over exploited'/ 'Critical' and 'Semi-critical' based on the stage of

ground water development and the long-term water level declining trend during the past decade (1995-2004). Out of 5723 assessment units (Blocks/ Mandals/ Talukas) in the country, 839 units in various States have been categorized as 'Over exploited', i.e., the annual ground water extraction exceeds the annual replenishable resource. In addition 226 units.,11 'Critical', i.e., the stage of ground water development is above 90 per cent and within 100 per cent of annual replenishable resource. There are 550 semi-critical units, where/the stage of ground water development is between 70 per cent and 100 per cent. List of these areas is being circulated to the State Pollution Control Boards and Ministry of Environment and Forests which refer the new industries/projects falling in these areas to the Central Ground Water Authority (CGWA) for obtaining permission.

The CGWA has so far notified 43 over-exploited areas in the country for regulation of ground water development and management. For enforcement of the regulatory directions issued under Section 5 of Environment Protection Act, 1986, concerned Deputy Commissioners/ District Magistrates have been authorized to take necessary action in case of violation of directives of CGWA in the notified areas. For more effective regulation of ground water development and management, Advisory Committees under the Chairmanship of District Collector/ Deputy Commissioners with members drawn from various organizations have been constituted which will render advice in matters pertaining to regulation of ground water development and management.

The CGWA have also notified 65 over-exploited areas in various States, for registration of ground water abstraction structures, which showed a very steep decline in ground water levels and required action for regulation. The CGWA has issued directions to the Chief Secretaries of all States having over-exploited blocks to take all necessary measures to promote/ adopt artificial recharge to ground water/ rain water harvesting.

The CGWA has also decided to notify 747 more over-exploited areas in the country incompliant of its mandate. As per the provisions under rule 4 of the Environment (Protection) Rules, 1986, objections from the public who are likely to be effected by the directions of the CGWA are regularly sought through public notices in the newspapers.

ARTIFICIAL RECHARGE OF GROUND WATER ADVISORY COUNCIL

The Government of India vide Resolution dated 17.04.2006 has constituted Artificial Recharge of Ground Water Advisory Council under the Chairmanship of Hon'ble Minister of Water Resources. The Advisory Council comprises Members from different Ministries/Departments, representatives of State Governments, Public Undertakings viz Oil & Natural Gas Corporation Ltd., Coal India Limited, etc., Financial Institutions like National Bank for Agriculture & Rural Development, Rural Electrification Corporation Ltd. (REC) etc., representative of Industries like Federation of Indian Chambers of Commerce & Industry, Confederation of Indian Industries, Associated Chambers of Commerce & Industries of India and renowned subject experts/farmers and representatives of NGOs. The main objective of setting up the Council is to popularize the concept of artificial recharge among all stakeholders and its adoption.

The first meeting of the Advisory Council was held on 22nd July, 2006 in Vigyan Bhawan, New Delhi which was inaugurated by Hon'ble Prime Minister. The Advisory Council made recommendations of far reaching importance such as to

prioritize action for recharge of ground water and rain-water harvesting in over exploited / critical and semi-critical blocks, prioritize the work on 31 districts identified as "farmers' distress hotspot" districts and to regulate large users of ground water particularly the industrial users.

BHOOMIJAL SAMVARDHAN PURASKAR & NATIONAL WATER AWARD

The Bhoomijal Samvardhan Puraskar and National Water Award have been instituted under the Ministry of Water Resources in the Year 2007 with an objective to encourage the Non-Governmental Organizations (NGOs) / Gram Panchayats / Urban Local Bodies (for population up to 1 lakh) for adopting innovative practices of ground water augmentation by rain-water harvesting and artificial recharge of ground water through people's participation in the targeted areas resulting in ensuring the sustainability of ground water resources and development of adequate capacity amongst the stakeholders. 18 puraskars representing the six zones namely Northern, Eastern, Southern, Western, Central and North Eastern and one National Water Award consisting of a cash award of Rs. 10 lakhs and a plaque with citation for the best innovative practice of ground water augmentation through rain water harvesting and artificial recharge from amongst 18 award winners of the Bhoomijal Samvardhan Puraskar have been envisaged. The puraskar / award is open to all registered NGOs, Gram Panchayats and Urban Local Bodies who have achieved excellence in the field of ground water management by adopting measures of rain-water harvesting and artificial recharge of ground water.

DECLARATION OF YEAR 2007 AS 'WATER YEAR'

The National Common Minimum Programme assigns priority to the water sector and water management. Irrigation and drinking water are also two important components of Bharat Nirman. With a view to generating the required response from all stakeholders and to involve them in drawing up more appropriate strategies, the Government of India has declared the Year 2007 as "Water Year" with particular focus on campaigns on conservation of water through electronic and print media, mass awareness programmes by CGWB to promote rain-water harvesting and artificial recharge of ground water, and also to promote awareness on the subject through participation in festivals and fairs.

The World Water Day was celebrated on 22nd March, 2007 and was inaugurated by the Hon'ble Prime Minister of India. Regional offices under the Ministry also celebrated the World Water Day. Bhoomijal Samvardhan Puraskars and one national award for Pani Panchayat were given at a befitting function at Vigyan Bhavan by the Hon'ble President of India on 12.9.2007.

SCHEME ON "ARTIFICIAL RECHARGE OF GROUND WATER THROUGH DUGWELLS IN HARD ROCK AREAS" IN SEVEN STATES

While presenting the Budget for 2007-08 on 28.02.2007, the Hon'ble Finance Minister announced a scheme on "Artificial Recharge of Ground Water through Dugwells in Hard Rock Areas" in seven States viz. Andhra Pradesh, Maharashtra, Karnataka, Rajasthan, Tamil Nadu, Gujarat and Madhya Pradesh costing Rs. 1800 crores. The scheme will cover **1180 Over-exploited, Critical and Semi-critical blocks,** falling mainly in hard rock areas of these states. Recharge to 4.455 million dugwells has been proposed under the proposed scheme.

NATIONAL WATER RESOURCES COUNCIL

National Water Resources Council has been set up by the Government of India in March 1983. The Prime Minister is the Chairman and Union Minister of Water Resources is the Vice-Chairman. Minister of State for Water Resources, concerned Union Ministers / Ministers of State, Chief Ministers of all States & Lieutenant Governors / Administrators of the Union Territories are the Members. Secretary, Ministry of Water Resources is the Secretary of the Council.

NATIONAL WATER BOARD

The Government of India constituted a National Water Board in September 1990 under the Chairmanship of Secretary, Ministry of Water Resources to review the progress achieved in implementation of the National Water Policy and to report the progress to the National Water Resources Council from time to time. The Secretaries of Union Ministries of Agriculture, Rural Development, Urban Development, Surface Transport, Environment & Forests, Planning and Science & Technology, Chairman, Central Water Commission, Chief Secretaries of all States / Union Territories are its Members. Member (Water Planning & Projects), Central Water Commission is the Member Secretary of the Council.

INTERNATIONAL COOPERATION

(a) INDIA-NEPAL COOPERATION

The Union Government is having continuous dialogue with Government of Nepal at various levels for cooperation in the field of Water Resources Development.

A Treaty on Integrated Development of Mahakali River had been signed between the Government of India and Government of Nepal in February 1996; which came into force in June 1997 (Mahakali Treaty). Pancheshwar Multipurpose Project on river Mahakali (known as river Sarda in India), is the centerpiece of Mahakali Treaty. India – Nepal Joint Group of Experts (JGE) has been overseeing the physical and financial progress with respect to finalization of Joint Detailed Project Report of Pancheshwar Multipurpose Project. All the related field investigations have been completed and Detailed Project Report is to be finalized after resolving the pending issues; which are under discussion with Nepal. The project will have power & irrigation benefits besides incidental benefits of flood moderation.

Agreement has also reached with Nepal to take up the joint field investigations, studies and preparation of Detailed Project Report of Sapta Kosi High Dam Multipurpose Project and Sun Kosi Storage cum Diversion Scheme. A Joint Project Office was opened in August 2004 in Nepal for undertaking the above work. The work of field investigations is in progress.

For dealing with the problems of inadvertent inundation caused by the construction of various works on the border rivers between India and Nepal, a Standing Committee on Inundation Problems (SCIP) between India and Nepal is also functioning since 1986 with a view to identifying the problem areas and suggest possible solutions on a continuing basis.

In order to have interaction at higher level pertaining to the cooperation in the field of Water Resources, including implementation of various agreements and understandings, a Nepal-India Joint Committee on Water Resources (JCWR) headed by Water Resources Secretaries of both the countries is functioning with the mandate to act as an Umbrella Committee over all other committees and groups.

(b) INDIA-BHUTAN COOPERATION

A scheme titled "Comprehensive Scheme for Establishment of Hydro-meteorological and Flood Forecasting Network on rivers common to India and Bhutan" is in operation. The network consists of 35 hydro-meteorological / meteorological stations located in Bhutan and being maintained by the Royal Government of Bhutan with funding from India. The data received from these stations are utilized in India by the Central Water Commission for formulating flood forecasts. A Joint Expert Team (JET) consisting of officials from the Government of India and Royal Government of Bhutan continuously reviews the progress and other requirements of the scheme. 22nd meeting of the JET was held in August 2006 at Darjeeling in India.

The matter relating to problem of floods created by the rivers originating from Bhutan and coming to India was taken up with the Royal Government of Bhutan. A Joint Group of Experts (JGE) on Flood Management has been constituted between India and Bhutan to discuss and assess the probable causes and effects of the recurring floods and erosion in the southern foothills of Bhutan and adjoining plains in India and recommend to both Governments appropriate and mutually acceptable remedial measures. The first meeting of JGE was held in Bhutan from 1st to 5th November 2004. The JGE had series of discussions and also made field visits to some of the affected areas, which included the sites prone to landslides, and dolomite mining areas. Based on the discussions, the JGE felt that a more detailed technical examination is required and accordingly a Joint Technical Team (JTT) under the Chairmanship of Member (PID), North Bengal Flood Control Commission has been constituted which held its first meeting in April, 2005. The JTT studied some sources of sediment load, nature of slides and suggested further studies and preparation of maps to be taken up for deciding remedial measures to be recommended by the JTT. Further, as per the decision taken in the first meeting of JGE, a five-member Indian team visited Tsatichu lake in Eastern Bhutan (which was formed due to massive landslide which occurred on the right bank of river Tsatichhu on 10th September 2003) alongwith the officials of Royal Government of Bhutan between 18th and 23rd December 2006. During the joint visit, it was observed that the quantity of water in the lake was very small and the threat to downstream areas due to flood including Indian Territory was negligible. However, it was recommended to monitor any future development like further landslide etc. leading to blockade of outlet and the level of water in the lake specially during monsoon.

(c) INDIA-BANGLADESH COOPERATION

An Indo-Bangladesh Joint Rivers Commission (JRC) is functioning since 1972 with a view to maintain liaison in order to ensure the most effective joint effort to maximize the benefits from common river systems which is headed by Water Resources Ministers of both the countries. The 36th meeting of the Indo-Bangladesh JRC was held at Dhaka from 19th –21st September 2005 wherein various matters pertaining to cooperation in Water Resources sector with Bangladesh were discussed. As per the decisions taken during 36th meeting of JRC the Hon'ble Ministers of Water Resources of India and Bangladesh alongwith their delegations undertook visits from 13th September to 21st September 2006 to sites of river banks protection, minor lift irrigation and drinking water schemes along the concerned common / border rivers including a stretch of river Ichhamati where river forms boundary between India and Bangladesh, to assess the situation on the ground. During field visit and discussions, there was good understanding between both sides and differences were

narrowed down. There was also better appreciation and greater clarity on the issues involved. However, as some more technical details were required, agreement could not be reached. It was decided that further discussions on the matter will be made in the next meeting of JRC which is proposed to be held in India in due course.

A new chapter in the Indo-Bangladesh relations opened up with signing of a Treaty by the Prime Ministers of India and Bangladesh on 12th December 1996 on the sharing of Ganga / Ganges waters at Farakka during the lean season. As per the Treaty, the Ganges water is being distributed at Farakka (which is the last control point on river Ganga in India) during lean period, from 1st January to 31st May every year on 10-daily basis in as per the formula provided in the Treaty. The validity of Treaty is 30 years. Though there is a provision of review of Treaty after five years, no party has asked for its review so far. The sharing of water as per the Treaty is monitored by a Joint Committee comprising the Members, Joint River Commission from Bangladesh and India. Three meetings of the Joint Committee are held every year. The Treaty is being implemented to the satisfaction of both the countries since 1997.

India is providing the flood data of Farakka for Ganga (from 15th June to 15th October), and the flood data of Pandu, Goalpara and Dhubri for Brahmputra and of Silchar for Barak during monsoon period (from 15th May to 15th October) to Bangladesh for use of their flood forecasting and warning arrangements, besides the data of river Teesta, Manu, Gumti, Jaladhaka and Torsa, etc. The transmission of flood forecasting information from India during the monsoon, which is being supplied free of cost has enabled the Civil and Military authorities in Bangladesh to shift the population affected by flood to safer places.

(d) INDO-CHINA COOPERATION

In the year 2002, the Government of India had entered into an MOU with China for provision of hydrological information on Yaluzangbu / Brahmaputra river in flood season by China to India. In accordance with the provisions contained in the MOU, the Chinese side is providing hydrological information (Water level, discharge and rainfall) in respect of three stations, namely Nugesha, Yangcun and Nuxia located on river Yaluzangbu / Brahmaputra from 1st June to 15th, October every year, which is utilized in the formulation of flood forecasts by the Central Water Commission.

An artificial lake was formed on Pare-chu as a result of landslide. The bursting of the lake would have caused havoc downstream on the Indian side in Himachal Pradesh to the people and the infrastructure including the Naptha Jhakri H.E. Project. The Government of India kept a close watch on the day to day development in this regard. In order to discuss the situation in Pare-chu, a team led by Shri R.K. Singh, Joint Secretary and Central Relief Commissioner, Ministry of Home Affairs comprising officers from Ministry of Water Resources, Ministry of External Affairs, Central Water Commission, Geological Survey of India and Central Mining Research Institute held discussions with the Chinese authorities at Lhasa on 19th and 20th September 2004. The team discussed various possible measures to address the situation and agreed to take up further action through diplomatic channels.

Subsequent to the visit to Lhasa, a technical team visited Beijing, China from 26th to 29th December 2004 to hold indepth discussions regarding blockade on river Pare-chu and establishment of additional hydrological stations on Langquin Zangbu (Sutlej) and Parlung Zangbo (tributary of Yaluzangbu i.e. Brahmaputra) and Zayu

Qu (Lohit). In March 2005 a Secretary level delegation visited Beijing to discuss the measures to be taken on Pare-chu issue. China agreed for exploring possibility of controlled release of artificial lake water and to work out the measures to be taken on the issue. But before any action could be taken the landslide dam breached on 26th June 2005.

For monitoring the water level of Pare-chu, two sites (downstream of landslide dam / lake site & upstream of lake formed) and two sites in India (one in J&K and another in Himachal Pradesh downstream of landslide dam) have been established in May 2005 for real time data transmission.

Another Memorandum of Understanding has been signed during the visit of the Chinese Premier to India in April, 2005 for supply of hydrological information in respect of Sutlej (Langquin Zangbu), in flood season.

The Hon'ble President of the People's Republic of China, paid a state visit to the Republic of India from 20 to 23 November, 2006. During the visit it was agreed to set up an expert-level mechanism to discuss interaction and cooperation on provision of flood season hydrological data, emergency management and other issues regarding trans-border rivers as agreed between them.

(e) INDUS WATER TREATY

Under the Indus Water Treaty 1960, India and Pakistan have created permanent posts of Commissioner for Indus Waters, one each in India and Pakistan, who are the representatives of the respective Governments for all matters arising out of the treaty and serve as the regular channel of communication with regard to implementation of the Treaty. The two Commissioners together form the Permanent Indus Commission, which holds periodical meetings, and also undertakes tours of inspection to projects / works in India and Pakistan. By way of implementation of the Treaty, the Permanent Indus Commission held its 106th tour of inspection and its 99th meeting, both in India. Secretary level talks under Composite Dialogue are also being held alternatively in India and Pakistan. The next round of talks is scheduled in India in 2007. Besides, the Neutral Expert appointed by the World Bank in May 2005 on the Points of Difference raised by Pakistan on India's Baglihar Hydro-Electric Plant (J&K), gave his Expert Determination on 12.02.2007. The decision upheld Design Flood, Gated Spillways and size and level of Sluice Spillways in India's design and provided for marginal changes in Free Board, Pondage and level of Intakes. It provided for India to perform annual draw down sluicing for maintenance and sustainability of the reservoir. The decision recognized India's right to utilize the waters of the Western Rivers of the Indus System of Rivers more effectively, within the ambit of the Treaty, for power generation. It emphasized the need to incorporate the State of Art technology for projects implemented under the Treaty and confirmed India's design of bottom outlets as the most important technique to be employed in managing the high volumes of sediment, which characterizes the Himalayan Rivers.

EXTERNAL ASSISTANCE

The extension of irrigation to the various regions of the country is a national priority. The Ministry assists the State Governments in tying up external assistance from different funding agencies to bridge the resource gap for harnessing their irrigation potential.

International support for development of country's water resources comes from multilateral agencies like the World Bank and Asian Development Bank and from the countries such as Japan, Germany. The World Bank continues to be the primary resource of external assistance in the water resources sector. At present, there are 14 ongoing projects with external assistance in various States. External assistance amounting to Rs. 415.131 crores has been received during 2006-2007 for various water resources schemes.

CENTRAL ORGANISATIONS

(a) CENTRAL WATER COMMISSION

The Central Water Commission (CWC) is a premier technical organisation in the country in the field of water resources since 1945. The Commission is entrusted with the responsibilities of initiating, co-ordinating and furthering, schemes for control, conservation and utilisation of water resources throughout the country in consultation with the state governments concerned for purposes of flood control, irrigation, drinking water supply and hydro power development. CWC also undertakes investigation, construction and execution of any such schemes as required.

The CWC is headed by a Chairman, who also holds the status of Ex-officio Secretary to the Government of India. It has three technical wings, namely, (i) Design and Research, (ii) Water Planning and Projects and (iii) River Management. Each of the wings is headed by an engineering officer designated as Member, with the Ex-officio status of an Additional Secretary to the Government of India. The wings consist of organisations headed by Chief Engineers, with Directorates under them, each headed by a Director / S.E. There are 32 organisations and 147 Directorates / Circles under the CWC.

There are thirteen regional organisations of CWC which are functioning from Bangalore, Bhopal, Bhubaneswar, Chandigarh, Coimbatore, Delhi, Hyderabad, Lucknow, Nagpur, Patna, Shillong, Silliguri and Gandhi Nagar, each headed by a Chief Engineer. These organisations closely interact with the states and are entrusted with the monitoring of medium and major projects, command area development, Rehabilitation and Renovation of water bodies, minor irrigation and other water management activities, appraisal of medium projects, flood forecasting and hydrological observations.

Broad Functions of CWC

The functions of CWC are:

- To undertake surveys and investigations to prepare designs and schemes for the development of river valleys for hydro power generation, irrigation by gravity flow or lift, flood management, environmental management, rehabilitation and resettlement, soil conservation, anti-water logging measures, reclamation of alkaline and saline soils, drainage and for drinking water supply;
- To advise and assist the State Governments in the investigation, surveys and preparation of river valley and hydro power development schemes;
- To undertake construction work of any river valley development scheme on behalf of the Government of India or State Government concerned;
- To collect, co-ordinate the collection of, publish and analyse the data relating to rainfall, runoff and temperature, silting of reservoirs, behaviour of hydraulic structures, environmental aspects etc.

- To collect, maintain and publish statistical data relating to water resources and to act as the Central Bureau of Information relating to water resources;
- To initiate morphological studies to visualise river behaviour, bank erosion / coastal erosion problems;
- To advise the Government of India and the concerned State Governments on the basin-wise development of water resources;
- To advise the Government of India with regard to all matters relating to the Inter-State water disputes;
- To initiate studies on socio-agro-economic and ecological aspects of irrigation projects for the sustained development of irrigation.

(b) CENTRAL SOIL AND MATERIAL RESEARCH STATION

The Central Soil & Materials Research Station (CSMRS), New Delhi is a premier National Institute of the country devoted to research and investigations, primarily in geotechnical engineering, construction materials and concrete technology. In addition to water resources sector involving hydroelectric and irrigation projects, CSMRS has been undertaking the challenging works pertaining to nuclear and super-thermal power projects, and other construction works. The Research Station also functions as consultant in India and for neighbouring countries such as Nepal, Bhutan, Mauritius, Sri Lanka and Afghanistan for projects and for organizations dealing with such works in the following areas of its specialization: Soil Mechanics and Foundation Engineering, Soil Dynamics, Rock Fill Technology, Geotextile, Grout Technology, Drilling Technology; Engineering Geophysics, Rock Engineering, Construction Materials and Concrete Technology, Geotechnical Instrumentation and Chemical aspects of Water and Engineering Materials.

CSMRS is at present executing institutional Cooperation Programme with Norwegian Geotechnical Institute, Oslo, Norway, in the field of "Safety evaluation and Risk Assessment for Ageing Dams in India".

SUBORDINATE ORGANISATIONS

(a) CENTRAL WATER AND POWER RESEARCH STATION

The Central Water and Power Research Station (CWPRS), Khadakwasla, Pune, is the center of excellence in hydraulic research at the national level. From its beginning in 1916 as an institution dealing with the twin problems of irrigation and drainage, the institution has grown to an institution of international standing for hydraulic research. CWPRS undertakes basic and applied research in the fields of hydraulics and is in the forefront in the use of complex physical and mathematical modeling techniques in solving diverse water resources issues related to riverine and coastal environment. As the Regional laboratory of ESCAP since 1971, CWPRS has offered its services to a number of projects in the neighborhood as well as countries in the Middle East and Africa.

The major disciplines / laboratories of CWPRS are: River Engineering, Reservoir and Appurtenant Structures, Coastal and Offshore Engineering. Ship Hydrodynamics, Hydraulic Machinery, Earth Science, Mathematical Modeling, Foundations and Structures and Instrumentation and Control Engineering. About 50 divisions well equipped with state-of-the-art equipment and software duly supported by infrastructure of high standards, associated with these disciplines are engaged in research.

(b) CENTRAL GROUND WATER BOARD (CGWB)

The Central Ground Water Board (CGWB) is the National Apex Organization in the field of ground water under the Ministry of Water Resources. The CGWB is vested with the mandate to "develop and disseminate technologies, and monitor and implement national policies for the scientific and sustainable development and management of India's ground water resources including their exploration, assessment, conservation, augmentation, protection from pollution and distribution based on principles of economic and ecological efficiency and equity."

The CGWB is a multidisciplinary scientific organisation consisting of Hydrogeologists, Geophysicists, Chemists, Hydrologists, Hydrometeorologists and Engineers, entrusted with the responsibilities of scientific studies, investigations, exploration, monitoring of ground water regime, assessment, augmentation and regulation of ground water resources in the country. The CGWB is headed by the Chairman who also heads the Central Ground Water Authority (CGWA). It has four technical wings, each headed by a Member, namely (i) Survey, Assessment and Monitoring Wing; (ii) Exploratory Drilling and material Management Wing; (iii) Sustainable Management and Liaison Wing and (iv) Training and Technology Transfer Wing. The CGWB has 18 Regional Offices, each headed by a Regional Director, 11 State Unit Offices and 17 Engineering Divisions in the country.

The CGWB periodically undertakes assessment of ground water resources of the country.

The ground water resources are unevenly distributed. There are areas in the States of Rajasthan, Delhi, Gujarat, Tamil Nadu, Punjab and Haryana, which experience decline in the level of ground water.

The CGWB carries out nationwide monitoring of ground water levels four times a year to keep a watch on the groundwater levels in the country. The reports on yearly basis are circulated to users in the State Governments.

It carries out scientific exploration of groundwater aided by remote sensing, geophysical survey and drilling and testing operation. It has so far drilled 23279 boreholes, which include 14276 exploratory wells. As per present dispensation, successful wells are handed over to the State Governments. As of now 5515 successful wells have been handed over to the States for use by them. The remaining are in the process of being offered to the States for use by them.

The CGWB has organized 344 mass awareness programme in the country to provide education and awareness to stakeholders in rain-water harvesting and ground water recharge. It has also rendered guidance to 2500 sites in developing designs for ground water recharging works in the country.

Central Ground Water Authority

The Central Ground Water Authority (CGWA) has been constituted under Section 3 (3) of the Environment (Protection) Act, 1986 to regulate and control development and management of ground water resources in the country. The CGWA has so far notified 43 over-exploited areas in the country for regulation of ground water development and management. For enforcement of the regulatory directions issued under Section 5 of EPA, 1986, concerned Deputy Commissioners/ District Magistrates have been authorized to take necessary action in case of violation of directives of CGWA in the notified areas. In these notified areas, installation of new ground water abstraction structures is not permitted without prior approval of the

CGWA. Advisory Committees under the Chairmanship of District Collector / Deputy Commissioners with members drawn from various organizations have been constituted which will render advice in matters pertaining to regulation of ground water development and management. The CGWA have also notified 65 over-exploited areas in various States, for registration of ground water abstraction structures, which showed a very steep decline in ground water levels and required action for regulation.

The CGWA is regulating withdrawal of ground water by industries / projects in over-exploited, semi-critical and critical blocks / talukas / mandals / districts through clearance of such proposals. The CGWA also conducts mass awareness and water management training programmes throughout the country as proactive measures to create awareness and capacity building in ground water management.

The CGWA has issued directions to all concerned to adopt roof top rain-water harvesting systems. The CGWA has issued directions to all the Chief Secretaries of States having over-exploited blocks to take all necessary measures to promote / adopt artificial recharge of ground water / rain-water harvesting.

(c) FARAKKA BARRAGE PROJECT

The Farakka Barrage Project was constructed for preservation and maintenance of Kolkata Port by improving the regime and navigability of the Bhagirathi-Hoogly river system. The river Bhagirathi, the feeder canal and navigation Lock at Farakka form part of the Haldia-Allahabad Inland Waterway. The Principal components of the project are: (a) 2,245 metre long barrage across the Ganga with a rail-cum-road bridge necessary for river training works, and a head regulator on the right side, (b) 213 metre long barrage across the river Bhagirathi at Jangipur, (c) Feeder canal of 1113 cubic metres per second (40000 cubic feet per second) carrying capacity and 38.38 km long, taking off from the head regulator on the right of the Farakka Barrage, and (d) Navigation works such as locks, lock channels, shelter basins, navigation lights and other infrastructure.

The Government of India, Ministry of Water Resources has extended the jurisdiction of the Farakka Barrage upto Rajmahal in the upstream (40 km from the Farakka Barrage) and upto Jalangi in the downstream (80 km from Farakka Barrage) for taking up the anti-erosion and bank protection works only. Accordingly, Farakka Barrage Project authority have started executing emergent anti-erosion works since the year 2005 along the bank of the river Ganga in some of the critical reaches in the extended portions.

(d) SARDAR SAROVAR CONSTRUCTION ADVISORY COMMITTEE

The Sardar Sarovar Construction Advisory Committee (SSCAC) located at Vadodara, was constituted in 1980 as per the directive of the Narmada Water Disputes Tribunal (NWDT), for scrutiny of estimates, technical features, design and to monitor the progress of the construction activity to ensure efficient, economical and timely execution of Unit-I (Dam and Appurtenant works) and Unit – III (Hydro-Power Complex) of the Sardar Sarovar Project (SSP). The Secretary, Ministry of Water Resources, is the Chairman of the Committee. Representatives from the departments like Irrigation, Power, Revenue, Welfare etc. concerned with the construction of the project of the four party States along with their counterparts from the Government of India and the Narmada Control Authority are Members of the Committee.

(e) BANSAGAR CONTROL BOARD

The Bansagar Control Board was constituted by the Central Government in consultation with the Governments of Madhya Pradesh, Bihar and Uttar Pradesh with a view to ensure efficient, economical and early execution of the Bansagar Dam on Sone river, including all connected works in Madhya Pradesh but excluding the canal systems. The headquarter of the Board is at Rewa (M.P.). The Union Minister of Water Resources is the Chairman of the Board. The day-to-day activities of the Board are managed by an Executive Committee of the Board under the Chairmanship of Chairman, Central Water Commission. Funds for the project are provided by the beneficiary States of Madhya Pradesh, Uttar Pradesh and Bihar in the ratio of 2:1:1.

The revised estimated cost of the Dam Project is Rs.1054.96 crore (at 1998 price level). The rock fill dams and non-overflow masonry dams on either flanks have been completed to its full height. All the overflow blocks have been completed up to the crest level of 326.40 m. and the reservoir was partially filled up to crest level in the monsoon year 2000-01. As per physical and financial programme for completion of the Bansagar Project, the entire project is expected to be completed during the year 2007-08.

(f) GANGA FLOOD CONTROL COMMISSION

Ganga Flood Control Commission with its headquarters at Patna, was established in 1972. It serves as the Secretariat and executive limb of Ganga Flood Control Board which is headed by Union Minister for Water Resources and has as it members, the Union Ministers for Finance, Railways, Surface Transport and Agriculture or their representatives, Union Minister of State for Water Resources, the Chief Ministers of the basin States or their representatives and Member, Planning Commission. The Commission is headed by a Chairman who is assisted by two full-time Members.

The main functions of the Commission include preparation and updating of a comprehensive plan for flood management, techno-economic appraisal of flood management schemes, assessment of adequacy of waterways under road and rail bridges, monitoring and performance evaluation of flood management schemes, and participation in international and national committees set up by the Government of India on Ganga basin States pertaining to the subject of flood management.

(g) UPPER YAMUNA RIVER BOARD

Yamuna water dispute regarding allocation of utilizable surface flow of Yamuna among the co-basin States up to Okhla was resolved by way of a MoU signed by the Chief Ministers of Himachal Pradesh, Haryana, Uttar Pradesh, Rajasthan and National Capital Territory of Delhi on 12 May 1994. As per the provision in the MoU, the Upper Yamuna River Board (UYRB) with its headquarters in the National Capital Region was constituted. Upper Yamuna Review Committee (UYRC) was also constituted, for supervising the working of the UYRB to ensure implementation of the MoU regarding allocation of surface flow of Yamuna and to issue directions, as deemed necessary, for proper development. Uttaranchal has also been made Member of Upper Yamuna River Board and Upper Yamuna Review Committee. The Upper Yamuna Review Committee held a meeting under the Chairmanship of Hon'ble Union Minister (WR) on 12 April 2006 which was attended by Hon'ble Chief Ministers of Rajasthan, Haryana and NCT of Delhi and Irrigation Ministers of Himachal Pradesh and Uttar Pradesh. Hon'ble Union Minister (WR) also held a special meeting of these basin states on 20.12.06 and discussed the issues related to

expediting the implementation of three storage dams in Upper Yamuna Basin viz. Renuka, Kishau & Lakhwar Vyasi for their early resolution.

PUBLIC SECTOR UNDERTAKINGS

(a) WATER AND POWER CONSULTANCY SERVICES (INDIA) LTD.

Water and Power Consultancy Services (India) Ltd. – WAPCOS is a "MINI RATNA" Public Sector Enterprise under the aegis of the Union Ministry of Water Resources. Incorporated on June 26th, 1969 under the Companies Act. 1956, WAPCOS has been providing consultancy services in all facets of Water Resources, Power and Infrastructure Sectors in India and Abroad.

Main fields of specialization of the company cover Irrigation and Drainage, Flood Control and Land Reclamation, River Management, Dams, Reservoir Engineering and Barrages, Integrated Agriculture Development, Watershed Management, Hydropower and Thermal Power Generation, Power Transmission and Distribution, Rural Electrification, Ground Water Exploration, Minor Irrigation, Water Supply and Sanitation (Rural and Urban), Environmental Engineering including Environmental Impact Assessment and Environmental Audit, Ports and Harbours and Inland Waterways, Rain-Water Harvesting; Survey & Investigations, Human Resource Management, System Studies and Information Technology. WAPCOS has also been venturing into newer fields such as Software Development, City Development Plans, Financial Management System, Technical Education, Quality Control and Construction Supervision, Roads & Bridges. The Company has recently amended its Articles of Association to provide concept to commissioning services for developmental projects in India and abroad.

WAPCOS' spectrum of services covers a wide range of activities e.g. pre-feasibility studies, feasibility studies, simulation studies, diagnostic studies, socio-economic studies, master plans and regional development plans, field investigations, detailed engineering including designs, detailed specifications, tendering process, contract and construction management, commissioning and testing, operation & maintenance, quality assurance & management, software development and human resource development.

WAPCOS has on date an authorized capital of Rs.200 lakhs. Since its inception, the performance of the company has been steadily growing and promising. The company has been able to manage its business operations so far from its own resources and has not taken recourse to any borrowings, loan or any other form of financial assistance from the Government or any other financial institution. WAPCOS has been able to pay consistently high percentage of dividends on its paid up capital and has been able to effect skilful utilisation of available human resources to match up with the job requirements. This is significant in view of the fact that consultancy and related activities are mainly dependent on the expert manpower input in the specialised technical fields of services, which is its real asset and strength.

The consultancy services are carried out in 3 main centres i.e. Water Resources, Power and Infrastructure. WAPCOS has the in-built capability to provide a multidisciplinary project team comprising its core of professionals. The Company's strong Human Resources Management has resulted in high turnover per employee.

WAPCOS have successfully completed / on-going consultancy assignments abroad in 40 countries and is registered with various international funding agencies for participating in the funded projects like World Bank / International Bank for

Reconstruction and Development, African Development Bank, Asian Development Bank, Food and Agriculture Organization, International Fund for Agricultural Development, United Nations Development Program, World Health Organization, West African Development Bank, Indian Technical and Economic Cooperation (ITEC) Programme, Overseas Economic Cooperation Fund, Japan Bank for International Cooperation(JBIC) etc. Apart from India, **WAPCOS is currently engaged in providing consultancy services in Afghanistan, Bhutan, Cambodia, Ethiopia, Eritrea, Laos, Lesotho, Rwanda, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.**

WAPCOS has been rated as "Excellent" by the Department of Public Enterprises during the last four years in succession and has been awarded Prime Minister's "MOU Award for Excellence in Performance" for the year 2005-2006. The Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India have selected WAPCOS amongst the top ten Central Public Enterprises for this award. The Company also received "MOU Excellence Certificate" for the year 2004-2005. WAPCOS has received "EEPC All India Export Award" under the category of "Star Performer in 2005-2006: Engineering Services-Large Enterprises" and "EEPC (Northern Region) Award" under the category of "Project Export / Consultancy Services-Large Enterprises in 2004-2005". WAPCOS bagged the Silver Trophy of "SCOPE Award for excellence and outstanding contribution to the Public Sector Management-Smaller Public Enterprises Category"; "Enterprises excellence Award" by Indian Institution of Industrial Engineering for the year 2003-2004. CMD, WAPCOS was bestowed "Bhartiya Shiromani Puraskar" and the Company was presented "Gold Medal" by Institute of Economic Studies for contribution made by WAPCOS in Nation Building.

(b) NATIONAL PROJECTS CONSTRUCTION CORPORATION LIMITED

National Projects Construction Corporation Limited (NPCC) has been occupying the distinction to be the first few Public Sector Enterprises set up by the Government at the initiative of Pt. Jawahar Lal Nehru during the first Five Year Plan with the objective of mixed economy and have lived through contributing its role for construction of prestigious projects in the fields of Hydro and Power projects, Dams and Barrages of national importance; besides undertaking construction and project management in many other diversified fields for the growth and development of the Nation. With a team of 900 experienced engineers and other executives & 1300 skilled and semi-skilled workmen, NPCC has successfully completed more than 200 projects of national importance during the past five decades of its existence. Construction of Wazirabad Barrage across river Yamuna in Delhi, Farakka Barrage in West Bengal, Asia's largest Sir Arthur Cotton Barrage across Godavari River in Andhra Pradesh deserves special mention besides various projects undertaken and executed successfully in India, Iraq, Nepal and Bhutan.

Presently NPCC is engaged in construction of Indo-Bangla Border Fencing Unit in North East and Pradhan Mantri Gramin Sadak Yojna works in six districts of Bihar. NPCC is also doing major works of Hindustan Aeronautics Limited at Bangalore, and Super Thermal Power Projects in M.P., Chhatisgarh and Maharashtra.

OTHER ORGANISATIONS

(a) NARMADA CONTROL AUTHORITY

The Central Government framed the Narmada Water Scheme, which, among other

things, constituted Narmada Control Authority and a Review Committee in 1980 for implementation of the decisions and directions of the Narmada Water Disputes Tribunal.

The Narmada Control Authority, a high powered inter-state body is headed by the Secretary, the Ministry of Water Resources as the Chairman with Secretaries of the Union Ministries of Power, Environment & Forests, Social Justice & Empowerment, Tribal Affairs, Chief Secretaries of the four party States, one Executive Member and the three full time Members appointed by the Central Government and four part-time Members in-charge of department of Irrigation / Power / State Electricity Boards appointed by the party States. The Review Committee of Narmada Control Authority (RCNCA) headed by the Union Minister of Water Resources comprises of Union Minister for Environment & Forests and Chief Ministers of the party states as Members. The Secretary, Ministry of Water Resources, is the convener of the RCNCA. It may suo-moto or on the application of any party state or Secretary to the Government of India, Ministry of Environment & Forests, review any decision of the Authority.

As per the decision taken by the NCA in its meeting on 8th March, 2006 for according permission to raise the height of the Sardar Sarovar Dam, the elevation of Block No. 22 to 50 have been subsequently raised to 121.92 metre. The Government of Gujarat has completed the raising of Sardar Sarovar Dam spillway blocks upto 121.92 m. All the 6 units of River Bed Power House and 5 units of Canal Head Power House have been commissioned successfully and are in operational condition. The total hydro power generated from the generating units already installed is 3390.19 million units during the year 2006-07. These energy benefits are shared by the party States as per the provisions of NWDT Award. Irrigation has been provided to about 61703 Ha in Gujarat. 130.85 million cubic metre of water was utilized for meeting drinking water (domestic & industrial) requirement in Gujarat.

(b) TUNGABHADRA BOARD

The Tungabhadra Board was constituted for the completion, operation and maintenance of the Tungabhadra Project. The Board is responsible for the common portion of the Tungabhadra Project. The Krishna Water Disputes Tribunal has made specific provision in the Award for the use of Tungabhadra water by the States of Karnataka and Andhra Pradesh. The responsibility for carrying out this specific provision relating to the use of Tungabhadra waters has been entrusted to the Tungabhadra Board by the Tribunal. The Board is regulating the water for irrigation, hydropower generation and other uses on the right bank.

The Board consists of a Chairman appointed by the Government of India, one Member from Government of India and two Members from concerned States, one each representing Andhra Pradesh and Karnataka. An officer of Central Government appointed, as the Secretary of the Board is the Chief Executive of the Board. The funds for the functioning of the Board are provided by the two State Governments.

The working table for canal-wise distribution of water to the States is prepared every year by the Tungabhadra Board in consultation with the State governments, and is reviewed from time to time during the water year. The regulation of water is carried out in accordance with the agreed working table. The power generated is shared between the States of Karnataka and Andhra Pradesh in the ratio of 20:80.

(c) BETWA RIVER BOARD

The Betwa River Board was constituted by the Ministry of Water Resources for efficient, economical and early execution of the Rajghat Dam Project, a joint venture of Madhya Pradesh and Uttar Pradesh. The headquarter of the Board is at Jhansi (U.P.). The Union Minister for Water Resources is the Chairman of the Board. The activities of the Board are managed by the Executive Committee of the Board under the Chairmanship of Chairman, Central Water Commission. The funds for construction of the Rajghat Dam, Power House Projects and for meeting the expenses of the Office of the Board are borne by the States of Madhya Pradesh and Uttar Pradesh in equal proportions.

The Rajghat Dam and Rajghat Hydro Electric Projects are inter-State projects of Madhya Pradesh and Uttar Pradesh. The estimated cost of the Rajghat Dam is Rs.300.60 crore (at 2000 price level) and that of the Power House 139.74 crore (at 1997 price level). The Rajghat Dam is almost complete. All the three units of Rajghat Hydro-Electric Project have been synchronized during 1999 and the power generation is continuing in all units since then.

(d) NATIONAL INSTITUTE OF HYDROLOGY

The National Institute of Hydrology (NIH), functioning since 1978, has its headquarters at Roorkee (Uttaranchal). To carry out field related research, the NIH has four regional centres located at Belgaum, Jammu, Kakinada and Sagar, and two centres for flood management studies at Guwahati and Patna.

The objectives of the Institute are: (a) to undertake, aid, promote and coordinate basic, applied and strategic research on all aspects of hydrology, contributing to sustainable water resources development in the country; (b) to act as a repository of knowledge and information, and dissemination of the same in the country; (c) to act as a centre of excellence for transfer of technology, human resources development and institutional development in specialized areas of hydrology; (d) to conduct user defined, demand-driven research through consultancy in the field of hydrology and (e) to cooperate and collaborate with relevant national and international organizations in achieving the above objectives. To fulfill these objections, the Institute has established world class laboratories in the area of nuclear applications in hydrology, water quality laboratory and remote sensing and GIS application laboratory.

The Institute is presently focusing studies and R&D on the following thrust areas: hydrology of extremes, impact of land use changes on water resources, groundwater modeling and management, sustainable water systems management, surface water modeling and regional hydrology and environmental hydrology. The Institute is involved in a number of nationally important water resources projects including World Bank funded Hydrology Project.

The NIH is also hosting the secretariat of INCOH, which is also the nodal agency in India for the International Hydrology Programme of UNESCO.

(e) BRAHMPUTRA BOARD

The Brahmputra Board was constituted in December, 1981 for planning and implementation of measures for the management of floods and bank erosion in the Brahmputra valley. The major activities of the Board are preparation of Master Plans and investigation of projects in the Brahmaputra and Barak basin, execution of schemes / projects and preparation of Detailed Project Reports in the North-Eastern

Region. The Board has already completed the Master plan, Parts-I & II pertaining to Brahmaputra River (Main Stem) and Barak River and its tributaries. Out of the 51 identified Master Plans under Part- III, which includes tributaries of the Brahmaputra and Barak and the rivers of Tripura, 36 have been approved by the Government of India and the rest are under various stages of preparation by Brahmaputra Board. The Board has taken over the construction of Pagladiya Dam Project approved at an estimated cost of Rs. 542.90 crore, the revised cost being Rs.1069.40 crore. The construction of the project is held up due to non-completion of ZIRAT survey (Project Evaluation) by the Government of Assam. Efforts are being made with State Government of Assam to carry out the Zirat Survey. The Board had taken up execution of Avulsion of Brahmputra at Dholla Hatighulli and a few anti-erosion and drainage development schemes in the N.E.Region, which also included immediate and long term anti-erosion measures for protection of Majuli Island in Assam during the Tenth Plan. These works are proposed to be continued during the Eleventh Plan.

(f) NATIONAL WATER DEVELOPMENT AGENCY

The Ministry of Water Resources had formulated a National Perspective Plan (NPP) in August, 1980 for water resources development by transferring water from water surplus basins to water deficit basins / regions by interlinking of rivers. The NPP has two main components, i.e. the Himalayan Rivers Development Component and the Peninsular Rivers Development Component. The NPP envisages additional irrigation benefits of 35 million hectare, i.e., 25 million hectare from surplus water and 10 million hectare by increased use of ground water which will be over and above the ultimate irrigation potential of about 140 million hectare from major, medium and minor irrigation projects and 34 million KW of hydropower, apart from the benefits of flood control, navigation, water supply, fisheries, salinity, pollution control, etc. The Himalayan Component of inter-basin water transfer proposals envisages benefits directly to the States of Uttar Pradesh, Haryana, Rajasthan, Gujarat, Assam, West Bengal, Bihar, Jharkhand and Orissa and enrich the Peninsular Component from the surplus waters of Brahmaputra. The Peninsular Component envisages benefit to the States of Andhra Pradesh, Orissa, Karnataka, Tamil Nadu, Pondicherry, Madhya Pradesh, Rajasthan, Maharashtra and Gujarat.

The National Water Development Agency (NWDA) was set up as a Society in 1982 to carry out surveys and investigations and to prepare feasibility reports of the links under the NPP. The NWDA carried out water balance studies of 137 basins / sub-basins and at 71 identified diversion points and topo-sheet studies of 74 identified storages and 37 link alignments under NPP and identified 30 links, comprising 16 under Peninsular Components and 14 under Himalayan Components for preparation of feasibility reports for effecting transfer of water. NWDA has completed feasibility reports of 16(14 under Peninsular and Indian portion of 2 under Himalayan component) water transfer links.

In December, 2002, a Task Force on Interlinking of Rivers (TF-ILR) was set up to suggest modalities for arriving at speedy consensus amongst the States for sharing and transfer of surplus water to deficit areas, providing guidance on norms of appraisal of individual projects in respect of economic viability, socio-economic impacts, environmental impacts and preparation of resettlement plans. The Task Force had submitted two Action Plans outlining the time schedules for the

completion of the feasibility studies, detailed project report, estimated cost, implementation schedule, concrete benefits and advantages of the project, etc. and possible approaches for funding, cost recovery and execution of ILR programme.

After comprehensive assessment of feasibility of Interlinking of Rivers in the country, the Task Force on Interlinking of Rivers, which had submitted Action Plans I & II and completed its mandated task was wound up in December 2004.

The National Common Minimum Programme (NCMP) envisaged that the Government would make a comprehensive assessment of the feasibility of linking the rivers of the country starting with the southern rivers in a fully consultative manner. The Government has also constituted a Committee of environmentalists, social scientists and other experts on ILR project in December 2004 to advise the Government on environmental, social issues, etc., and to involve them in the consultation process. The committee has held three meetings so far.

The implementation of the inter-basin water transfer link schemes are taken up in a phased manner depending on the priorities of the Government.

The links namely (i) Ken-Betwa link (ii) Parbati-Kalisindh-Chambal link (iii) Godavari(Polavaram) – Krishna(Vijayawada) link (iv) Damanganga-Pinjal link and (v) Par-Tapi-Narmada Link have been identified as priority links for consensus building amongst concerned States for taking up preparation of Detailed Project Reports (DPR).

The present status of these links is as under:-

Ken-Betwa link: A tripartite MoU was signed between the Union Minister of Water Resources, Chief Ministers of Government of Madhya Pradesh and Uttar Pradesh on 25th August, 2005 in the presence of Dr. Manmohan Singh, Hon'ble Prime Minister of India for preparation of DPR of Ken-Betwa link and the same is in progress.

Parbati-Kalisindh-Chambal link: Government of Madhya Pradesh & Rajasthan have agreed in principle for preparation of DPR of Parbati-Kalisindh-Chambal link.

Par-Tapi- Narmada Link and Damanganga – Pinjal Link: Draft MoU for preparation of DPRs of Damanganga-Pinjal and Par-Tapi-Narmada link have been forwarded to the concerned States of Maharashtra & Gujarat for their concurrence.

Godavari (Polavaram) – Krishna (Vijaywada) link: This link is being discussed with the concerned States.

RIVER SYSTEM

The river systems of India can be classified into four groups viz., (i) Himalayan rivers, (ii) Deccan rivers, (iii) Coastal rivers and (iv) Rivers of the inland drainage basin. The Himalayan rivers are formed by melting snow and glaciers and therefore, continuously flow throughout the year. During the monsoon months, Himalayas receive very heavy rainfall and rivers swell, causing frequent floods. The Deccan rivers on the other hand are rainfed and therefore temporal. Many of these are non-perennial. The Coastal streams, especially on the West Coast are short in length and have limited catchment areas. Most of them are non-perennial. The streams of the inland drainage basin of western Rajasthan are few and far apart. Most of them are of an ephemeral character.

The main Himalayan river systems are those of the Indus and the Ganga-Brahmaputra-Meghna system. The Indus, which is one of the great rivers of the world, rises near Mansarovar in Tibet and flows through India and thereafter through

Pakistan and finally falls in the Arabian Sea near Karachi. Its important tributaries flowing in Indian Territory are the Sutlej (originating in Tibet), the Beas, the Ravi, the Chenab and the Jhelum. The Ganga-Brahmaputra-Meghna is another important system of which the principal sub-basins are those of Bhagirathi and the Alaknanda, which join at Dev Prayag to form the Ganga. It traverses through Uttaranchal, Uttar Pradesh, Bihar and West Bengal. Below Rajmahal hills, the Bhagirathi, which used to be the main course in the past, takes off, while the Padma continues eastward and enters Bangladesh. The Yamuna, the Ramganga, the Ghaghra, the Gandak, the Kosi, the Mahananda and the Sone are the important tributaries of the Ganga. The Chambal and the Betwa are the important sub-tributaries, which join Yamuna before it meets the Ganga. The Padma and the Brahmaputra join inside Bangladesh and continue to flow as the Padma or Ganga. The Brahmaputra rises in Tibet, where it is known as Tsangpo and runs a long distance till it crosses over into India in Arunachal Pradesh under the name of Dihang. Near Passighat, the Debang and Lohit join the river Brahmaputra and the combined river runs all along the Assam in a narrow valley. It crosses into Bangladesh downstream of Dhubri.

The principal tributaries of Brahmaputra in India are the Subansiri, the Jia Bhareli, the Dhansiri, the Puthimari, the Pagladiya and the Manas. The Brahmaputra in Bangladesh receives the flow of the Tista, etc., and finally falls into the Ganga. The Barak river, the Head stream of the Meghna, rises in the hills in Manipur. The important tributaries of the river are the Makku, the Trang, the Tuivai, the Jiri, the Sonai, the Rukni, the Katakhal, the Dhaleswari, the Langachini, the Maduva and the Jaitnga. The Barak continues in Bangladesh till the combined Ganga-Brahmaputra join it near Bhairab Bazar.

In the Deccan region, most of the major river systems flowing generally in east direction fall into the Bay of Bengal. The major east flowing rivers are the Godavari, the Krishna, the Cauvery, the Mahanadi etc.; the Narmada and the Tapti are major West flowing rivers.

The Godavari in the southern Peninsula is the second largest river basin covering 10 per cent of the area of India. Next to it is the Krishna basin in the region, while the Mahanadi is the third largest basin. The basin of the Narmada in the uplands of the Deccan, flowing to the Arabian Sea, and of the Kaveri in the south, falling into the Bay of Bengal are about the same size, though with different character and shape.

There are numerous coastal rivers, which are comparatively small. While only handful of such rivers drain into the sea near the delta of east coast, there are as many as 600 such rivers on the West coast.

A few rivers in Rajasthan do not drain into the sea. They drain into the salt lakes and get lost in the sand with no outlet to sea. Besides these, there are the desert rivers, which flow for some distance and are lost in the desert. These are the Luni, the Machhu, the Rupen, the Saraswati, the Banas, the Ghaggar and others.

The River system of India can also be described in terms of river basins. The entire country has been divided into twenty river basins / group of river basins comprising twelve major basins and eight composite river basins. The twelve major river basins are (1) Indus, (2) Ganga-Brahmaputra-Meghna, (3) Godavari, (4) Krishna, (5) Cauvery, (6) Mahanadi, (7) Pennar, (8) Brahmani-Baitarani, (9) Sabarmati, (10) Mahi, (11) Narmada and (12) Tapi. Each of these basins has a drainage area exceeding 20000 sq. km.

The eight composite river basins combining suitably together all the other remaining medium (drainage area of 2000 to 20000 sq.km) and small river systems (drainage area less than 2000 sq.km) for the purpose of planning and management are: (1) Subernarekha - combining Subernarekha and other small rivers between Subernarekha and Baitarani, (2) East flowing rivers between Mahanadi and Pennar; (3) East flowing rivers between Pennar and Kanyakumari; (4) Area of Inland Drainage in Rajasthan Desert; (5) West flowing rivers of Kutch and Saurashtra including Luni; (6) West flowing rivers from Tapi to Tadri; (7) West flowing rivers from Tadri to Kanyakumari and (8) Minor rivers draining into Myanmar (Burma) and Bangladesh.

27 Welfare

THE Ministry of Social Justice and Empowerment is committed towards educational development, economic empowerment and social empowerment of persons belonging to Scheduled Castes, Other Backward Classes, rehabilitation of persons with disabilities, victims of drug abuse, aged etc.

CONSTITUTIONAL MEASURES

NATIONAL COMMISSION FOR SCHEDULED CASTES

The National Commission for Scheduled Castes, a Constitutional body monitors the safeguards provided for Scheduled Castes and also review issues concerning their welfare. The Commission has wide powers to protect, safeguard and promote the interests of the SCs. The Commission has been conferred powers of a civil court trying a suit, to summon and enforce the attendance of any persons from any part of India and examining on oath, receiving evidence on affidavits. The Commissioner submitted its first report on 17-7-2006.

NATIONAL COMMISSION FOR SAFAI KARMACHARIS

The National Commission for Safai Karmacharis, a statutory body has, inter-alia, been empowered to investigate into specific grievances as well as matters relating to implementation of programmes and schemes for welfare of Safai Karmacharis.

PROTECTION OF CIVIL RIGHTS ACT, 1955 AND SCHEDULED CASTES AND SCHEDULED TRIBES (PREVENTION OF ATROCITIES) ACT, 1989

Protection of Civil Rights Act, 1955 provides for preventing any person on grounds of untouchability, from enjoying the rights accruing on account of abolition of untouchability. Provisions for legal aid to Scheduled Castes in cases relating to untouchability have been made by 22 States / Union Territories. Special Cells have been set up in 21 States for initiating and exercising supervision over prosecution for contravention of provisions of the PCR Act. 22 special Mobile Courts have been set up in Andhra Pradesh for expeditious disposal of such cases. Necessary guidelines and instructions are issued to States from time to time for effective implementation of the provisions of the PCR Act.

The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989), specifies offences, which are considered as atrocities, and provides for deterrent punishments for commission of the same. Comprehensive Rules were also framed under the SCs and STs (POA) Act in 1995, which among other things provided for relief and rehabilitation of the affected people. It also envisages preventive measures, and State have to evolve schemes, among and Union Territories except Arunachal Pradesh and Nagaland have specified special courts for trial of offences under this Act. 137 Exclusive Special courts have also been set up in Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Rajasthan, Tamil Nadu and Uttar Pradesh, 11 States (Andhra Pradesh, Bihar, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu and Uttar Pradesh) have identified atrocity prone areas.

Under the Centrally sponsored scheme for implementation of both the Act, State Governments are funded on 50:50 basis and Union Territories are given cent

percent central assistance. During the year 2006-07 Rs. 36.44 crore were released to States / UTs.

A Committee under the Chairpersonship of the Hon'ble Minister of Social Justice & Empowerment has been constituted for effective coordination to devise ways and means to curb offences of untouchability and atrocities against SCs and STs and their effective administration / implementation. The first meeting of the Committee was held on 18.092006 at New Delhi and the second meeting was also held on 15.01.2007 at Jaipur. The Inter-State Council Meeting was held on 9th December 2006 exclusively on the subject 'Offences of untouchability against Scheduled Castes and Scheduled Tribes'. This meeting was chaired by the Hon'ble Prime Minister and attended by the Chief Ministers and other senior officials. As a follow up the Hon'ble Minister (SJ&E) had addressed a d.o. letter dated 24.4.2007 to all chief Ministers of States to ensure that the year 2007-08 turns out to be an untouchability and atrocity free year.

The Ministry of Social Justice & Empowerment has launched National Awards to be given to Non-Governmental Organizations (NGOs) or individual Human Rights Activists who have done outstanding fieldwork in the area of eradicating untouchability and in combating offences of atrocities under the Protection of Civil Rights Act, 1955 and the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989. There will be four awards every year. Award to individual activist shall carry an amount of Rs. 2.00 lakhs and Rs. 5.00 lakhs to an Institution. The Award will be given to outstanding NGOs or Human Rights Activists in each of the four regions of the country namely North, South, East and West for rendering yeomen services in the said fields. The award may be shared by more than one recipient or organization. The Award has been instituted in 2006 and would be given annually. The date of receipt of the nominations for the award would be 31st October of the respective year. Modalities and other details of the Scheme are available at the website of the Ministry of Social Justice & Empowerment.

EDUCATIONAL DEVELOPMENT

Pre-Matric Scholarships for Children of those engaged in Unclean Occupation : Under the Scheme, the Children of families engaged in unclean occupations such as scavenging, flaying and tanning are assisted to pursue education upto matriculation level. The scholarship is provided through State Governments and Union Territory Administrations. Central assistance is provided to the State Governments on 50:50 basis and to the Union Territory Administration on 100 per cent basis over and above their committed liability. Students amongst target groups with disabilities are also assisted. There is no income ceiling prescribed under the scheme.

The scheme provides scholarship of Rs. 40 per month in classes I to V, Rs. 60 per month in classes VI to VIII and Rs. 75 per month in classes IX to X in respect of day scholar; for hostellers Rs. 300 per month in classes III to VIII and Rs. 375 per month in classes IX to X.

The duration of scholarship in an academic year is ten months. The Day Scholars and hostellers are eligible for ad-hoc grant of Rs. 550 and Rs. 600 per students gap annum respectively. During 2006-07 Rs. 20.25 crores has been released to States / UTs for covering about 6.54 lakh students.

Post-Matric Scholarships for SC Students : Under the scheme, financial assistance is provided to Scheduled Caste students for pursuing studies beyond matriculation

in recognised institutions. The assistance include maintenance allowance for various categories of courses, reimbursement of compulsory non-refundable fee charged by the institutions and other allowance such as study tour charges, thesis typing / printing charges and book grant, revisions of income ceiling to Rs. one lakh per annum for eligibility Scholarship is disbursed through respective State Governments and UT Administrations.

The scheme provides for 100 per Central assistance to the State. Governments and UT Administrations over and above the perspective committed liability of the States / UTs. The committed liability of the North Eastern States has, however, been dispensed with. During the year 2006-07 an amount of Rs. 526 crores has been released to the States / UTs for covering over estimated 29.58 lakh students.

Rajiv Gandhi National Fellowship Scheme : A new Scheme named Rajiv Gandhi National Fellowship (RGNF) for Scheduled Caste Students has been introduced during the current financial year 2005-06. Fellowships, in the form of financial assistance, are to be provided to students belonging to Scheduled Castes to pursue higher studies leading to award of M.Phil and Ph.D. degree. A student, belonging to Scheduled Caste registered in a regular and full time M.Phil / Ph. D course in a University / Academic institution will be eligible for the fellowship. The fellowships will be on the same scale as that of the University Grants Commission (UGC) Junior Research Fellowships. In total, 1333 fellowships each year are to be awarded initially during 2005-06 and 2006-07. The scheme is being implemented through the University Grants Commission. An amount of Rs. 34.18 crores was released to UGC during 2006-07 under the scheme.

National Overseas Scholarship and Passage Grants for Higher Education : Under this scheme assistance is provided to meritorious students for pursuing higher studies of Masters level courses, Ph.D and Post Doctoral research Programmes abroad in specified fields like Engineering, Technology and Science only. Rate of maintenance allowance was enhanced to US$ 8,200 or Pounds Sterling 5,200 per annum per candidate. The contingency allowance for books, essential apparatus, study tour charges, typing and binding of thesis, etc. was also revised to US $ 550 or Pound Sterling 400 per annum for candidates in U.K. the scheme provides for air passage, visa fee, equipment allowance, incidental expenses charged by the institution as per actual and insurance premia, etc. The awardees were permitted to undertake research / teaching assistantship. Financial assistance under the scheme is provided for a maximum period of four years for Ph.D. research, for 3 years for Master's Programme. Students whose family income exceeds Rs. 18,000 per month are not eligible for assistance and only one child of the same parents / guardians is eligible to get benefit under the scheme. The prospective awardees should not be more than 35 years of the age. During 2006-07, Rs. 1.05 crores was disbursed to 20 students that include 17 SCs, two students from denotified nomadic and semi-nomadic tribe and one student from landless agricultural labourers and traditional artisans.

Upgradation of Merit for SC Students : The main objective of the scheme is to upgrade the merit of Scheduled Caste students by providing them with facilities for all-round development through education in residential schools. The scheme provides for 100 per cent Central assistance to States / UTs for arrangement of remedial and special coaching for SC students studying in class IX to XII. Financial assistance is provided to students as package grant of Rs. 15,000 per year per student, out of which Rs. 5,000 is for boarding and lodging, Rs. 1,000 for pocket expenses, Rs. 2,000

for books and stationery and Rs. 7,000 as an honorarium honorarium to Principals / experts involved in providing the remedial / special coaching. SC students with disability enjoy additional benefits. During the year 2006-07 Rs. 3.00 crores were released to the States / UTs.

Coaching and Allied Scheme for Weaker Sections including SCs, OBCs and Minorities : The scheme aimed to equip aspiring students for preparing them for various competitive exams. Aspiring students take their guidance and coaching from the centers run by State Governments / UTs, Universities and NGOs. These centres are extended Central assistance to provide coaching to students. During 2006-07, Rs. 3.91 crores was released to the implementing agencies in pre-revised schemes.

Hostels for Scheduled Caste Boys and Girls : The objective of the Scheme is to provide hostel facilities to SC Boys and Girls studying in middle schools, higher secondary schools, colleges and Universities. The financial assistance is provided for construction of hostels. The maintenance of hostel, boarding and lodging of students, however, rest with the respective States / UTs. The Scheme provides for release of Central Assistance to State Govts. on 50:50 matching share basis and 100% to UTs and also 90% to Central Universities. Other Universities can also get Central Assistance upto 45% and the remaining amount has to be provided by their respective States (45%) and themselves 10%. The NGOs also get assistance on the basis of 45:45:10 through their States / UTs for extension of their existing hostels. During the year 2006-07 Rs. 25.23 crores was released for construction of 109 boys hostel and Rs. 28.811 crore for construction of 204 girls hostels.

DR. AMBEDKAR FOUNDATION

The main objective of the Foundation is to prorogate the ideology and message of Baba Saheb Dr. B.R. Ambedkar among the masses in India as well as abroad. The following were achievements under different schemes during the year. A sum of Rs. 6.25 lakhs was released for benefiting 25 persons under Dr. Ambedkar Medical Scheme. A sum of Rs. 58.39 lakhs were released for maintenance of Dr. Ambedkar Chairs in Universities / Institutions for research for the year 2006-07. The Foundation also published collected works in Tamil and Urdu under Samajik Samta Kendra Yojana.

ECONOMIC DEVELOPMENT

Special Central Assistance to Scheduled Castes Sub Plan (SCSP) : Under Special Central Assistance (SCA) to Scheduled Castes Sub Plan (SCSP) (earlier known as SCP), cent percent assistance is provided to State and Union territories as an additive to their Special Component Plans. The assistance would be used to give an added thrust to the development programmes for SC persons living below poverty line. During the year 2006-07 Rs. 459.15 crores was released to States / UTs.

National Scheduled Castes Finance and Development Corporation : The National Scheduled Castes Finance and Development Corporation (NSFDC) provides concessional finance for employment generation to the persons belonging to the Scheduled Castes living below double the poverty line (i.e. Rs. 40,000 p.a. in rural areas and Rs. 55,000 p.a. in urban areas), skill development through training, entrepreneurial development and innovative projects. The Corporation is also

implementing 'Mahila Samridhi Yojana' The Corporation has assisted 53,315 beneficiaries during the year 2005-06.

National Safai Karamcharis Finance and Development Corporation : National Safai Karamcharis Finance and Development Corporation (NSKFDC) extends concessional finance assistance to the Safai Karamcharies beneficiaries for establishments 'Mahila Samridhi Yojana'. The Corporation has assisted 77,970 beneficiaries during 2006-07.

State Scheduled Castes Development Corporation : State Scheduled Castes Development Corporation (SCDCs) are functioning in 26 States / Union Territories. The Central Government contributes 49 per cent to the authorised share capital of the SCDC's against the 51 per cent contributed by the State Government. During the year 2005-06 Rs. 16,902 lakhs was released as Government of India's contribution to benefit anticipated 77,970 beneficiaries.

Scheme for Rehabilitation of Manual Scavengers : A new Self Employment Scheme for Rehabilitation, of Manual Scavengers (SRMS) has been launched from January 2007 for rehabilitation of scavengers and their dependents by March, 2009 with total expenditure of Rs. 735.60 crores. The Central Govt. has released Rs. 56.00 crores during 2006-07 to NSKFDC as Grant in aid for implementation of the scheme.

Voluntary Organisations Working for Scheduled Castes : The objective of the scheme is to utilise the services of capable and reliable voluntary organisations in the process of social-economic development of scheduled casts. Under this scheme, grant-in-aid is given to the voluntary organisations to the extent of 90 per cent of each project cost for activities such as general / technical / vocational education including pre-school education, medical centers, dispensaries and income generating activities.

DEVELOPMENT OF SCHEDULED TRIBES

The tribal people of India, who come under the category of 'Scheduled Tribes' (STs) in terms of the provisions of the Constitution of India, number 8.43 crore–constituting 8.2 per cent of the population of the country (Census 2001).

Scheduled Areas and Tribal Areas : Scheduled Tribes live in contiguous areas unlike other communities. It is, therefore, much simpler to have an area-approach for development activities and also regulatory provisions to protect their interests.

In order to protect the interests of Scheduled Tribes with regard to land alienation and other social factors, provisions of ''Fifth Schedule'' and ''Sixth Schedule'' have been enshrined in the Constitution.

The Fifth Schedule under Article 244(1) of Constitution defines "Scheduled Areas'' as such areas as the President may by Order declare to be Scheduled Areas after consultation with the Governor of the State.

The Sixth Schedule under Article 244 (2) of the Constitution relates to those areas in the States of Assam, Mehalaya, Tripura and Mizoram which are declared as "Tribal Areas" and provides for District Councils and / or Regional Councils for such Areas. These Councils have been conferred with wide ranging legislative, judicial and executive powers.

The Fifth Schedule Areas : The criteria for declaring any area as a "Scheduled Area'' under the Fifth Schedule are : (a) Preponderance of tribal population, (b) Compactness and reasonable size of the area, (c) A viable administrative entity such

as a district, block or taluk, and (d) Economic backwardness of the area as compared to neighbouring areas.

The specification of ''Scheduled Areas'' in relation to a State is by a notified Order of the President, after consultation with the State Governments concerned. The same applies for altering, increasing, decreasing, incorporating new areas, or rescinding any Orders relating to ''Scheduled Areas''.

The advantages of Scheduled Areas are that : (a) The Governor of a state, which has Scheduled Areas, is empowered to make regulations in respect of the following : (1) Prohibit or restrict transfer of land from tribal people; (2) Regulate the business of money lending to the members of Scheduled Tribes. In making any such regulation, the Governor may repeal or amend any Act of Parliament or of the Legislature of the State, which is applicable to the area in question. (b) The Governor may be public notification direct that any particular Act of Parliament or of the Legislature of the State, shall not apply to a Scheduled Area or any part thereof in the State or shall apply to such area subject to such exceptions and modifications as he may specify. (c) The Governor of a State having Scheduled Areas therein, shall annually, or whenever so required by the President of India, make a report to the President regarding the administration of he Scheduled Areas in that State and the executive power of the Union shall extend to the giving of directions to the State as to the administration of the said area. (d) Tribes Advisory Council (TAC) shall be established in States having Scheduled Areas. The role of TAC is to advise the State Government on matters pertaining to the welfare and advancement of the Scheduled Tribes in the State as may be referred to it by the Governor. The TAC will consist of not more than twenty members of whom about 3/4 are from ST-MLAs. (The TAC may also be established in any State having Scheduled Tribes but not Scheduled Areas on the direction of the President of India. (e) The Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA), vide which the provisions of Panchayats, contained in Part IX of the Constitution, were extended to Scheduled Areas, also contain special provisions for the benefit of Scheduled Tribes.

The Sixth Schedule - Tribal Areas : The Sixth Schedule under Article 244 of the Constitution identifies Autonomous districts in the Tribal Areas in the states of Assam, Meghalaya, Tripura and Mizoram. It also makes provisions for recognition of Autonomous Regions within these Autonomous Districts. These have been specified in Parts I, II, IIA & III of the table appended to paragraph 20 of the Sixth Schedule. In other words, areas where provisions of Sixth Schedule are applicable are known as Tribal Areas. The State-wise details of Tribal Areas are as under :-

Part-I	Assam	1. The North Cachar Hills District
		2. The Karbi-Anglong District
		3. The Bodo Land Territorial Area Districts
Part II	Meghalaya	1. Khasi Hills District
		2. Jaintia Hills District
		3. The Garo Hills District
Part IIA	Tripura	Tripura Tribal Areas District
Part III	Mizoram	1. The Chakma District
		2. The Mara District
		3. The Lai District

The administration of Autonomous Districts and Autonomous Regions is done through District Councils / Regional Councils. These Councils are elected bodies and have powers of legislation, administration of justice apart from executive, developmental and financial responsibilities. The District or Regional Councils are empowered to make rules with the approval of the Governor with regard to matters like establishment, construction or management of primary schools, dispensaries, markets, cattle ponds, ferries, fisheries, roads, road transport and water-ways in the district.

The Autonomous Councils of the North Cachar Hills and Karbi Anglong have been granted additional powers to make laws with respect to other matters like secondary education, agriculture, social security and social insurance, public health and sanitation, minor irrigation, etc.

The Councils have also been conferred powers under the Civil Procedure Code and Criminal Procedure Code for trial of certain suits and offences, as also the powers of a revenue authority for their area for collection of revenue and taxes and other powers for the regulation and management of natural resources.

PROCEDURE FOR DECLARATION AS ST

The term "Scheduled Tribes" is defined in the Constitution of India under Article 366(25) as ''such tribes or tribal communities or parts of groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this Constitution''. Article 342 prescribes the procedure to be followed in the matter of specification of Scheduled Tribes.

In terms of Article 342(1), the President may, with respect to any State or Union Territory, and where it is State, after consultation with the Governor thereof, notify tribes or tribal communities or parts thereof as Scheduled Tribes. This confers on the tribe or part of it a Constitutional status invoking the safeguards provided for in the Constitution, to these communities in their respective States / UTs.

Thus, in terms of Article 342(1), only those communities who have been declared as such by the President through an initial public notification will be considered as Scheduled Tribes. Any further amendment in the list is to be done through an Act of Parliament [Article 342(2)]. Parliament may, by law, include in or exclude from the list of Scheduled Tribes, any tribe or tribal community or parts of thereof.

It is also worth noting that the above Article also provides for listing of Scheduled Tribes State-wise / Union Territory-wise and not on an all-India basis. Thus the list of Scheduled Tribes is State-specific. In other words, a community declared as Scheduled Tribe in one State need not be so in another State.

SCHEDULING AND DE-SCHEDULING OF TRIBES

Thus, the first specification of Scheduled Tribes in relation to a particular State / Union Territory is by a notified order of the President, after consultation with the State Governments concerned. The above Article also provides for listing of Scheduled Tribes State-wise / UT-wise and not on an all-India basis. The orders can be modified subsequently only through an Act of Parliament.

The criteria generally adopted for specification of a community as a Scheduled Tribe are : (1) indications of primitive traits; (b) distinctive culture; (c) shyness of contact with the community at large; (d) geographical isolation i.e. backwardness.

These are not spelt out in the Constitution but have become well established.

They take into account the definitions in the 1931 Census, the reports of the first Backward Classes Commission (Kalelkar) 1955, the Advisory Committee on Revision of SC / ST lists (Lokur Committee) 1965 and the Joint Committee of Parliament on the Scheduled Castes and Scheduled Tribes Orders (Amendment) Bill, 1967 (Chanda Committee) 1969.

There are over 600 tribes (with many of them overlapping in more than one State) as notified under Article 342 of the Constitution of India, spread over different States and Union Territories of the country. It is worth noting that no community has been specified as a Scheduled tribe in relation to the States of Haryana and Punjab and the Union Territories of Chandigarh, Delhi and Pondicherry.

ASCERTAINING ST STATUS OF INDIVIDUALS

General

Where a person claims to belong to a Scheduled tribe by birth, it should be verified: (a) that the person and his parents actually belong to the community claimed; (b) that the community is included in the Presidential Order specifying the Scheduled Tribes in relation to the concerned State; (c) that the person belongs to that State and the area within that State in respect of which the community has been scheduled; (d) he may profess any religion; (e) that he or his parents / grandparents, etc., should be permanent resident of the State / UT on the date of notification of the Presidential Order applicable in his case; (f) a person who is temporarily away from his permanent place of residence at the time of the notification of the Presidential Order–applicable in his case, say for example to earn a living or seek education, etc. can also be regarded as a Scheduled Tribe, if his tribe has been specified in that order in relation to his home State / Union Territory; (g) but he cannot be treated as such in relation to the place of his temporary residence notwithstanding the fact that the name of his tribe has been scheduled in respect of that State where he is temporarily settled, in any Presidential Order; (h) in the case of persons born after the date of notification of the relevant Presidential Order, the place of residence for the purpose of acquiring Scheduled Tribe status, is the place of permanent abode of their parents at the time of the notification of the Presidential Order under which they claim to belong to such a tribe. This does not apply to the STs of the Lakhadweep Islands for whom there is a requirement of being born in the U.T. in order to be eligible for ST status.

Scheduled Tribe claims on migration

i) Where a person migrates from the portion of the State in which his / her community is scheduled, to another part of the same State in respect of which his / her community is not scheduled, the person will continue tobe deemed to be a member of the Scheduled Tribe, in relation to that State

ii) Where a person migrates from one State to another, he can claim to belong to a Scheduled Tribe only in relation to the State to which he originally belonged and not in respect of the State to which he has migrated.

Scheduled Tribe claims through marriages

The guiding principle is that no person who is not a Scheduled Tribe by birth will be deemed to be a member of Scheduled Tribe merely because he or she has married a person belonging to a Scheduled Tribe. Similarly a person who is a member of a Scheduled Tribe will continue to be a member of that Scheduled Tribe, even after his or her marriage with a person who does not belong to a Scheduled Tribe.

Issue of Scheduled Tribe certificates

The candidates belonging to Scheduled Tribes may get Scheduled Tribe certificates, in the prescribed form, from any one of the following authorities: (1) District Magistrate / Additional District Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / 1st Class Stipendiary Magistrate / City Magistrate / Sub Divisional Magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner [not below the rank of 1st Class Stipendiary Magistrate]. (2) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate. (3) Revenue Officers not below the rank of Tehsildar. (4) Sub-Divisional Officer of the Area where the candidate and / or his family normally resides. (5) Administrator / Secretary to the Administrator / Development Officer [Lakshadweep Islands].

Punishments for officials issuing Scheduled Tribe Certificates without proper verification

Action is to be taken under the relevant provisions of the Indian Penal Code if any official is found to have issued a Scheduled tribe certificate carelessly and without proper verification. This will be in addition to other action to which they are liable under the appropriate disciplinary rules applicable to them.

Liberalization of procedure for issue of Scheduled Tribe certificates to migrants from other States / Union Territories.

Persons belonging to a Scheduled Tribe who have migrated from one State to another for the purpose of employment, education etc. experience great difficulty in obtaining ST certificates from the State from which they have migrated. In order to remove this difficulty, it has been decided that the prescribed authority of a State Government / Union Territory Administration may issue a Scheduled Tribe certificate to a person who migrated from another state, on the production of the genuine certificate issued to his father / mother by the prescribed authority of the State of the father / mother's origin except where the prescribed authority feels that a detailed enquiry is necessary through the state of origin before issue of the certificate. The certificate will be issued irrespective of whether the tribe in question is scheduled or not in relation to the State / Union Territory to which the person has migrated to.

Procedure for inclusion in or exclusion from the list of Scheduled Tribes

In June 1999, the Government approved modalities for deciding claims for inclusion in, or exclusion from, the lists of Scheduled Tribes. According to these approved guidelines, only those claims that have been agreed to by the concerned State Government, the Registrar General of India and the National Commission for Scheduled Castes and Scheduled Tribes will be taken up for consideration.

Whenever representations are received in the Ministry for inclusion of any community in the list of Scheduled Tribes of a State / UT, the Ministry forwards that representation to the concerned State Government / UT Administration for recommendation as required under Article 342 of the Constitution. If the concerned State Government recommends the proposal, then the same is sent to the Registrar General of India (RGI).

If RGI is satisfied with recommendation of the State Government and recommends the proposal to the Central Government, the Government refers the proposal to the National Commission for Scheduled Tribes for their recommendation. If the National Commission for Scheduled Tribes also recommends the case, the matter is processed for the decision of the cabinet after consulting the concerned

administrative Ministries. Thereafter the matter is put up before the Parliament in the form of a Bill to amend the Presidential Order.

GENERAL STATISTICS

According to the 2001 Census, the population of Scheduled tribes in the country was 8.43 crore - i.e., constituting 8.2 per cent of the total population of the country.

DEMOGRAPHIC STATISTICS : 2001 CENSUS

S. No.	India / State	Total population	ST Population	Percentage of STs to total population in the State
1	Mizoram	888,573	839,310	94.5
2	Lakshadweep	60,650	57,321	94.5
3	Nagaland	1,990,036	1,774,026	89.1
4	Meghalaya	2,318,822	1,992,862	85.9
5	Arunachal Pradesh	1,097,968	705,158	64.2
6	Dadra and Nagar Haveli	220,490	137,225	62.2
7	Manipur	2,166,788	741,141	34.2
8	Chhattisgarh	20,833,803	6,616,596	31.8
9	Tripura	3,199,203	993,426	31.1
10	Jharkhand	26,945,829	7,087,068	26.3
11	Orissa	36,804,660	8,145,081	22.1
12	Sikkim	540,851	111,405	20.6
13	Madhya Pradesh	60,348,023	12,233,474	20.3
14	Gujarat	50,671,017	7,481,160	14.8
15	Rajasthan	56,507,188	7,097,706	12.6
16	Assam	26,655,528	3,308,570	12.4
17	J&K	10,143,700	1,105,979	10.9
18	Maharashtra	96,878,627	8,577,276	8.9
19	Daman and Diu	158,204	13,997	8.8
20	Andaman and Nicobar	356,152	29,469	8.3
21	Andhra Pradesh	76,210,007	5,024,104	6.6
22	Karnataka	52,850,562	3,463,986	6.6
23	West Bengal	80,176,197	4,406,794	5.5
24	Himachal Pradesh	6,077,900	244,587	4.0
25	Uttarakhand	8,489,349	256,129	3.0
26	Kerala	31,841,374	364,189	1.1
27	Tamil Nadu	62,405,679	651,321	1.0
28	Bihar	82,998,509	758,351	0.9
29	Uttar Pradesh	166,197,921	107,963	0.1
30	Goa	1,347,668	566	0
31	Haryana	21,144,564	0	0
32	Punjab	24,358,999	0	0
33	Chandigarh	900,635	0	0
34	Delhi	13,850,507	0	0
35	Pondicherry	974,345	0	0
	India	**1,028,610,328**	**84,326,240**	**8.2**

The tribal population are normally seen to be living in the following three categories of locations:

1.	North-Eastern Region (NER)	Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim
2.	Central Tribal Belt (CTB)	Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Chhattisgarh, Andhra Pradesh, Orissa, Bihar, Jharkhand West Bengal, Dadra and Nagar Haveli, and Daman and Diu
3.	Other States / UTs	Himachal Pradesh, Uttar Pradesh, Uttaranchal, Karnataka, J and K, Tamil Nadu, Kerala, Andaman and Nicobar Islands, and Lakshadweep.

The Tribal communities live in about 15 per cent of the country's area, in varying ecological and geo-climatic conditions, plains, forests, hills and inaccessible areas. Tribal groups are at different stages of social, economic and educational development. They have their presence in the States and Union Territories except Haryana, Punjab, Chandigarh, Delhi and Pondicherry. The predominant tribal-populated States of the country (i.e., those with tribal population of more than 50 per cent of the total population of the State are: Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Union territories of Dadra & Nagar Haveli and Lakshadweep. If a comparison is made amongst ST population alone, more than half the ST population of the country is concentrated in the States of Madhya Pradesh, Chhattisgarh, Maharashtra, Orissa, Jharkhand and Gujarat. The largest number of tribes (i.e. 62) are in the State of Orissa. The next major concentration is in the North-Eastern States.

Primitive Tribal Groups (PTGs) : While some tribal communities have adopted a mainstream way of life at one of the spectrum, there are 75 Primitive Tribal Groups (PTGs) in 17 States and Union Territories of Andaman and Nicobar Islands, who are characterized by:- (a) a pre-agriculture level of technology, (b) a stagnant or declining population, (c) extremely low literacy, and (d) a subsistence level of economy.

Their total population as per the 1991 census was about 24.12 lakh. Most of these groups are small in number, have attained various levels of social and economic progress and generally live in remote habitat, with poor administrative and infrastructure back up.

Population Profile: Many indicators in respect of Scheduled Tribes like their demography, sex-ratio, education, livelihood profile, health profile have been compiled periodically through the Census operations or by the National Sample Survey Organisation (NSSO) or the Central Statistical Organisation (CSO).

The population of Scheduled Tribes has been on the increase since 1961. The census reveals that the tribal population had grown at the rate of 24.45 per cent during the period 1991-2001. The decadal population growth between the Census Year 1981 to 1991 in respect of the tribal population had been higher (31.64 per cent) than that for the overall population (23.51 per cent). However during census years 1991 to 2001 it had been 24.45 per cent against the growth rate of 22.66 per cent for the entire population.

As compared to the sex ratio for the overall population (933 females per 1000 male), the sex ratio among Scheduled Tribes is more favourable, at 978 females per 1,000 males (2001 census).

Literacy: The literacy rate for overall population has increased from 52.2 per cent to 65.38 per cent between 1991 to 2001. In case of Scheduled Tribes the increase in literacy has been from 29.62 per cent to 47.10 per cent. The literacy rate among tribals (47.10 per cent) is however far below the overall literacy in the country (64.8 per cent).

The female literacy rate among tribals during the period 1991 to 2001 increased from 18.2 per cent to 34.8 per cent which is lower by approximately 20 per cent as compared to literacy rate of the females of the general population. However, the significant point is the increase in the total as well as the female literacy among tribals. These disparities are compounded by higher dropout rates in formal education, resulting in a disproportionately low representation in higher education.

Job profile: According to the 1991 Census figures, 42.02 per cent of the ST population were main workers, of whom 54.50 per cent were cultivators and 36.09 per cent agricultural labourers. Thus, about 82 per cent of the main workers from these communities were engaged in primary sector activities.

Indicators of Backwardness: Not surprisingly, the cumulative effect has been that the proportion of Scheduled Tribes below the poverty line is substantially higher than the national average. A majority of Scheduled Tribes continue to live below the poverty line, have poor literacy rates, suffer from malnutrition and diseases and are vulnerable to displacement.

The Central Government and the State Governments have been implementing schemes / programmes for the upliftment of STs like reservation in Services, Tribal Sub-Plans, Central Schemes, Centrally Sponsored Schemes, etc. However, a lot more is required to be done to achieve the desired development goals for STs.

DEVELOPMENT OF STs

We have seen that the HDI (Human Development Indices) of tribal population is quite low as compared to the rest of the population. This is mainly because they live in clusters generally in far flung areas, which are remote or in the vicinity of forests. The development programmes meant for the general public often elude the tribal population for the reasons of inaccessibility and difficult terrain. Nevertheless the Government of India and the State Governments have taken a number of measures over the years to improve the conditions of STs and for their development. But a lot more needs to be done. This emphasis on development of STs is quite visible in the Agenda Items of the National Common Minimum Programme (NCMP) adopted by the Central Government in May 2004.

TRIBAL SUB-PLAN (TSP)

Upgradation of administration through the innovative strategy of the Tribal Sub-Plan (TSP) for STs was launched at the beginning of the 5th Five Year Plan in 1974-75, covering 21 States and 2 U.T.S., where Scheduled Tribes constitute a sizeable population. This special strategy was expected to ensure that all the general development sectors, both at the Central and State levels, earmark funds for STs in proportion to their population so that adequate benefits from all the concerned sectors flow to this disadvantaged group. Thus the TSP strategy seeks to ensure adequate flow of funds for tribal development not only under every State Plan funds, but also from all the Central Ministries / Departments. TSP is a part of the overall plan of a State / UT or a Central Ministry / Department, and is therefore called a Sub-Plan.

The TSP to promote development activities through legal and administrative support. The TSP strategy is being implemented through 195 Integrated Tribal Development Projects (ITDPs) / Integrated Tribal Development Agencies (ITDAs), 259 Modified Area Development Approach (MADA) and 82 Clusters. The benefits of the Tribal Sub-Plan are also extended to the scattered tribal population.

The TSP is financed by four sources namely, flow from Centrally Sponsored Schemes. Special Central Assistance, State Plan, and Institutional finance. The Central Ministries have also been requested to utilized at lease 8% of their budget for the welfare and development of Scheduled Tribes.

The TSP strategy has been extended to the following 21 States and 2 UTs:

TSP STATES AND UTs

1.	Andhra Pradesh	13.	Manipur
2.	Assam	14.	Orissa
3.	Bihar	15.	Rajasthan
4.	Chhattisgarh	16.	Sikkim
5.	Gujarat	17.	Tamil Nadu
6.	Himachal Pradesh	18.	Tripura
7.	Jammu and Kashmir	19.	Uttar Pradesh
8.	Jharkhand	20.	Uttaranchal
9.	Karnataka	21.	West Bengal
10.	Kerala	22.	Andaman and Nicobar Islands
11.	Madhya Pradesh	23.	Daman and Diu
12.	Maharashtra		

The TSP concept has not been extended to Haryana, Punjab, Delhi, Chandigarh and Pondicherry where there are no notified STs. Nor has it been extended to the tribal-majority States / UTs of Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Dadra and Nagar Haveli and Lakshadweep.

The resources for the State TSP comprise of the total funds pooled out of the : (1) State Plan outlay; (2) Central Schemes and Centrally Sponsored Schemes under the Sectoral Outlays of the Central Ministries; (3) Special Central Assistance (SCA); (4) Grants to States from M / o Tribal Affairs under the 1st Proviso to Art. 275(1) of the constitution; (5) Institutional Finance

The idea is that the funds so pooled under TSP should enable an integrated development effort being mounted in Tribal Areas through different sectors like agriculture, animal husbandry, irrigation, forestry, education, health, etc. Each State / UT have to: (a) identify the resources for TSP areas; (b) prepare a broad policy framework for the development; and (c) define a suitable administrative strategy for its implementation.

As is common knowledge, Development Schemes (i.e., Plan Schemes) for the benefit of STs in States / UTs are undertaken by the Central Government with the approval of the Planning Commission. These schemes fall under the following categories: (a) Central Schemes (for which the Central Governments bears 100 per cent costs by way of grants) and / or (b) Centrally Sponsored Schemes (for which there is a cost sharing between the Central Government and the State Governments concerned, usually on 50:50 basis or any other percentage as may be agreed upon).

Hence Central Ministries have also to similarly quantify the funds from sectoral programmes for TSP in proportion to the percentage of the tribal population in the country (i.e., 8 per cent which is the basic minimum but not the ceiling). The Central Ministries / Departments have to take the following steps: (a) Formulate appropriate need-based programmes for Tribal Areas; (b) Suitably adapt the ongoing programmes to suit the specific requirements of Scheduled Tribes; (c) Quantity funds for Tribal Areas under Central Ministries programmes; and (d) Earmarking of senior officer exclusively to monitor the progress of implementation of the programmes for the welfare of Scheduled Tribes.

SPECIAL CENTRAL ASSISTANCE FOR TRIBAL SUB-PLAN

In support of TSP, the Government of India launched the SCA scheme in 1974 to the States and the UTs, as an additive to fill up the gaps, especially in the family based income-generating programmes. As a result, there has been a substantial increase in the flow of funds during the Ninth Five Year Plan for the development of STs besides enlargement of the share of benefits for STs under all the development programmes.

The SCA to TSP is provided by the Ministry of Tribal Affairs to 21 Tribal Sub-Plan States including North Eastern States of Assam, Manipur and Tripura. Since 2003-04 the Ministry of Home Affairs is releasing the funds under SCA to TSP meant for the UTS.

The SCA is to be utilised in conjunction with the TSP flow with a view to meeting the gaps, which are not otherwise taken care of by the State Plan. The objective and scope of SCA to TSP was originally meant for filling up of the critical gaps in the family-based income-generation activities of the TSP. From the Tenth Five Year Plan, the objective and scope of SCA to TSP has been expanded to cover the infrastructure incidental to income-generation.

The funds released under SCA to TSP to State Governments / UT Administrations are as follows.

(Rs. in crore)

Five Year Plan	Fund released
V	119.31
VI	486.11
VII	846.95
VIII	1484.12
IX	2009.61
X	2960.83

The ultimate objective of extending SCA to TSP is to boost the demand based income-generation programmes and thus raise the economic and social status of tribals in sectors of agriculture, horticulture, land reforms, watershed development / soil and moisture conservation, animal husbandry, ecology and environment, development of forests / forest villages, development of Entrepreneurship and SSI and tribal women. During 2005-06, an amount of Rs 688.82 crore was released to the States.

Grants under the First Proviso to Article 275(1) of the Constitution : The Constitution of India under the First Proviso Article 275(1) of the Constitution provides

for assured special financial assistance for promoting the welfare of STs and for raising the level of administration of the Scheduled Areas to that of the rest of the State.

The Ministry of Tribal Affairs releases grants to 21 Tribal Sub-Plan (TSP) and four Tribal-majority States to meet the cost of minor irrigation and other such projects for Tribal Development as may be undertaken by the State Government with the approval of Government of India, for raising the level of administration of the Scheduled Areas therein to that of the rest of the State. Funds are now being released against specific infrastructural projects like roads, bridges, solar electrification, construction of school, hostel building, irrigation facilities, etc. Since 2005-06 part of grants under Article 275(1) of the Constitution has been earmarked for minor irrigation schemes on STs land.

Programme for Development of Forest Villages

Development of forest villages is one of the thrust areas of tribal development during the 10th Five Year Plan. The Planning Commission allocated Rs. 450 crore to the Ministry of Tribal Affairs for the development of forest villages at an average allocation of Rs. 15 lakh per village. There are about 2,474 such forest villages at an average allocation of Rs. 15 lakh per village. There are about 2,474 such forest villages in 12 States, which are still managed by State Forest Departments. It is estimated that there are about 2.5 lakh tribal families in these villages. A process of conversion of these forest villages into revenue earning villages is underway.

The funds released under the scheme are as follows:

(Rs. in lakh)

Year	Fund Released
2005-06	19180.86
2006-07	22097.09
2007-08 (till 31.5.07)	4646.82

Releases made in various Plans under Article 275(I)

Plan	Rs. in crore
V	60.00
VI	80.00
VII	100.00
VIII	340.00
IX	741.00
X	1662.70

An amount of Rs. 380 crore was provided to State governments for infrastructure projects during 2005-06.

Since 1997-98, a part of funds under Article 275(1) of the Constitution is also released for setting up “Eklavya Model Residential Schools” to provide quality education to the tribal students. This will enable the tribal children to avail of the facility of reservation in higher and professional educational courses as well as in higher levels of jobs in the Government and Public Sector undertakings. So far 100 such schools have been sanctioned in 24 States.

Scheme for Primitive Tribal Groups (PTGs): A Central Sector Scheme was introduced in 1998-99 for the all-round development of these groups under which financial assistance is made available to Integrated Tribal Development Projects, Tribal Research Institutes and Non-Governmental Organisations for undertaking projects / activities not covered by any of the existing schemes.

Boys' / Girls' Hostels for Scheduled Tribes (Centrally Sponsored Scheme): The Scheme of Girls' Hostels, which started in the Third Plan, and another scheme for construction of Boys' Hostels was in operation since 1989-90 is a useful instrument of spreading education among ST Girls, whose literacy still stands at 18.19 per cent as per 1991 Census as against the general female literacy of 29.23 per cent. The scheme of Boys' Hostels has since been merged with the scheme of Girls' Hostels in the Tenth Five Year Plan. Under the scheme, Central assistance is given to States / UTs for construction of new hostel buildings and / or extension of existing hostels. This is a Centrally Sponsored Scheme where the cost of the construction of the hostel building is equally shared between the Centre and the State in ratio of 50:50. In case of UTs, the Central Government bears the entire cost of the building. The cost of construction is based on the State PWD schedule of rates or local CPWD schedule of rates, whichever is lower. Maintenance of the hotel is the responsibility of the concerned States / UTs. The number of seats in a hostel is limited and generally is up to 100. The hostels are for ST girls in middle and high schools, colleges and universities.

Boys Hostel for Scheduled Tribes (Centrally Sponsored Scheme) : The objectives, items and conditions as well as the pattern of assistance of this Scheme for same as that of the scheme for Girls Hostels. The scheme is a operation since 1989-90.

Budget Allocations, actually released and beneficiaries are given below :

Boys and Girls Hostels

(Rs. in crore)

Plan Period	Outlay		Actually Released		No. of Hostels Constructed		No. of Beneficiaries	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
8th	17.00	14.00	14.34	15.08	271	269	9799	10945
9th	36.53	36.77	29.69	24.93	300	296	13746	19705
10th (during the 10th Plan both schemes were merged)	104.00	88.41			389		24379	

Establishment of Ashram School in Tribal Sub-Plan Area : The scheme of Ashram School, a Centrally Sponsored Scheme, was launched in 1990-91 with the objective to extend facilities like establishment of residential schools for STs in an environment conducive to learning to increase the literacy rates among the tribal students and to bring them at par with the other population of the country. The funding for the scheme with the State is done on matching (50-50) basis, while cent percent assistance is given to UTs.

Budget Allocations, actual released and beneficiaries are given below:

(Rs. in crore)

Plan period	Outlay	Actually Released	No. of Ashram Schools constructed	No. of seats
VIII	10.00	13.70	266	13485
IX	44.86	29.38	340	65090
X	78.30	42.97	232	17650

Upgradation of Merit of ST Students : The objective of this Central Sector scheme is to upgrade the merit of ST students by providing them remedial and special coaching in classes IX to XII. While the remedial coaching aims at removing deficiencies in various subjects, the special coaching is provided with a view to prepare the students for competitive examinations for seeking entry into professional courses like Engineering and Medical disciplines. The scheme provides for 100 per cent Central assistance to the States / UT's. A, package grant of Rs. 15,000 per cent per student per year is provided and the State / UTs are not required to bear any financial burden. The students with disabilities amongst STs receive specified special allowances like reader's allowance, escort's allowance, etc.

During the year 2000-2001 no grant-in-aid was released under the Scheme.

Budget Allocations, actually released and beneficiaries are given below:

(Rs. in crore)

Plan period	Outlay	Actually Released	Physical Achievements
IX	4.20	3.60	3291 students*
X	5.56	4.58	3352 students

* the number of beneficiaries from 1997-98 to 1999-2000 are for SCs & STs.

Post-Matric Scholarships for Scheduled Tribes Students

The objective of the scheme is to provide financial assistance to students belonging to STs pursuing Post-Matriculation recognized courses in recognized institutions. The scheme covers professional, technical, non-professional and non-technical courses at various levels. It also includes correspondence courses including distance and continuing education and is implemented by the State Government and UT Administrations, covering 100% Central Assistance over and above the committed liability which is required to be borne by them from their own budgetary provisions.

Budget Allocations, actually released and beneficiaries are given below :

(Rs. in crore)

Plan period	Outlay	Actually Released	Physical Achievements
IX	221.55	260.65	2639088
X	389.09	683.98	3744000

Vocational Training in Tribal Areas : The main aim of this scheme is to develop the skill of the tribal youth in order to gain employment / self employment opportunities. This scheme was introduced in 1992-93 as Central Sector Scheme and implemented through the State Governments / UT Administrations, Institutions or Organisations set up by Government as autonomous body, educational and other institutions like local bodies and cooperative societies and Non-Governmental Organizations. The capacity of each vocational training center is 100 with hostel facility for 50. Each center caters to five vocational courses in traditional skills depending upon the employment potential of the area. Each tribal boy / girl is trained in two trades of his / her choice, the course in each trade being of three months duration. Each trainee is attached at the end of six months to a Master Craftsman in a semi-urban area for a period of six months to learn his / her skill by practical experience, the practical experience if each trade being of three months duration. There is a provision for monthly stipend and for raw material for the trainees.

Budget Allocations, actually released and beneficiaries are given below:

(Rs. in crore)

Name of the Five year Plan	Outlay	Actual Released	No. of VTC
VIII	9.00	11.11	73
IX	30.25	17.44	203
X	33.56	24.35	290

Education of Girls in Low Literacy Pockets : The scheme envisages setting up of residential educational complex as from first to fifth standard. This Scheme was launched in 1993-94 with the objective of raising the literacy level of tribal females in 48 identified trial districts in eight States with female literacy below two per cent. This scheme was revised in July 1998 and now covers 136 districts having female literacy of less than 10 per cent in 14 States. An amout of Rs. 7.91 crore has been released to 84 complexes during 2006-07 benefittting 9646 ST girls.

Grants-in-Aid to Voluntary Organisations : The Ministry gives Grant-in-Aid to voluntary organisations working for the welfare of STs for projects like residential schools, hostels, medical units, computer training units, shorthand and typing training unit, balwadis / creches (in areas not covered by the ICDS programme), libraries and audio-visual units. The grant is generally restricted to 90 per cent of the approved total cost of the project and the balance 10 per cent is borne by the grantee organisations. An amount of Rs 54.60 crore has been released during 2006-07.

Rajiv Gandhi National Fellowship (RGNF) : The Ministry of Tribal Affairs has launched a new Central Sector Scheme namely Rajiv Gandhi National Fellowship (RGNF) on the initiative of the Planning Commission from the Year 2005-06. Scheme is for providing fellowship to ST students to enable them to pursue higher studies such as M.Phil and Ph.D. Total number of scholarships are 667 per year and maximum duration of the scholarship is 5 years. Accordingly an amount of Rs. 7.95 crores and Rs 15.90 crores were released to the U.G.C. for disbursement of fellowships to ST candidates for the years 2005-06 and 2006-07 respectively.

National Overseas Scholarship Scheme for Scheduled Tribes (Non-Plan): The Scheme provides for financial assistance to meritorious students for pursuing higher

studies abroad in specified fields of Master level courses, Ph.D. and Post-Doctoral research programmes, in the field of Engineering, Technology and Science for Scheduled Tribes, Denotified, Nomadic and Semi-nomadic tribes. The selected candidates are provided the cost of tuition and other educational fees charged by the foreign university, etc., maintenance and other grants along with travel expenses. In addition passage grants are also available to candidates belonging to ST who are in receipt of merit scholarship for postgraduate studies, research or training abroad (excluding attending seminars, workshops, conferences) from a foreign government / organisations or under any other scheme where cost of passage is not provided. The Scheme of NOS has been revised in 2004-05.

The scheme provides financial assistance to meritorious ST students for pursuing higher studies abroad in specified fields of Master level courses, Ph.D. and Post-Doctoral research programmes, in the field of Engineering, Technology and Science.

Budget Allocations, funds actually by released and beneficiaries are given below:

Plan period	Outlay	Funds Actually Released	Physical Achievements
IX(2000-01)	114	50	5 students
X	418	104.95	10 students (provisional awards have been issued.)

Scheme of Top Class Education for ST Students

The Ministry of Tribal Affairs has introduced a new scheme of Top Class Education of ST students from 2007-08 with the objective of encouraging meritorious ST students for pursuing studies at degree and post degree and post degree level in any of the selected list of institutes of excellence, in which the scholarship scheme would be operative. There are 127 top-rated institutes approved under the scheme in both the Government and private sectors covering the field of management, medicine, engineering, law and commercial courses. Each institute has been allocated five awards, with a ceiling of a total of 635 scholarships per year.

Grants-in-Aid for Minor Forest Produce (MFP) Operations: This is a Central Sector Scheme, with 100 per cent grant, available to the State Tribal Development Cooperative Corporations, Forest Development Corporations, and Minor Forest Produce (Trading and Development) Federations for taking up the minor forest produce operations. The funds under the scheme is available to the State TDCCS / FDC's for : (i) increasing the quantum of MFP handled by setting off operational losses, if need be : (ii) strengthening the share capital base of the Corporation for undertaking MFP operations thereby increasing the quantum of MFP presently handled; (iii) setting up of scientific warehousing facilities, wherever necessary; (iv) establishing processing industries for value addition with the objective of ensuring maximum returns on the MFPs for the tribals; (v) giving consumption loans to tribals; and (vi) supplementing Research & Development (R&D) efforts.

Exchange of visits by STs : The Scheme "Exchange of Visits by Tribals" providing wider exposure and experience sharing to the tribals by visits to the more developed areas of the country.

NATIONAL SCHEDULED TRIBES FINANCE AND DEVELOPMENT CORPORATION

The Government of India set up the National Scheduled Tribes Finance and Development Corporation (NSTFDC) in April 2001 by bifurcating the National Scheduled Castes and Scheduled Tribes Financial Development Corporation. The NSTFDC is a Government of India undertaking registered under Sec. 25 of the Companies Act, 1956 as a non-profit company with an authorised share capital of Rs 500 crore.

The Corporation extends financial assistance to Scheduled Tribes at concessional rate for income generating schemes costing upto Rs 10 lakh per unit, provides grants for skill development programme for STs and fill the critical gaps by providing backward and forward linkages for activities undertaken by the target group. Members of the Scheduled Tribes whose annual family income does not exceed double the poverty-line income limit, are eligible for financial assistance in the fields of agriculture and allied activities, manufacturing and service sector activities.

A new scheme Adivasi Mahila Sashaktikaran Yojana has been introduced from the year 2002-03. Scheduled Tribe women below the poverty line are to be assisted for small economic activities to augment their income with a loan of up to Rs 50,000 at an interest rate of four per cent per annum. This scheme is expected to benefit a large number of ST families living below the poverty line.

TRIBAL COOPERATIVE MARKETING DEVELOPMENT FEDERATION OF INDIA LTD.

The Tribal Cooperative Marketing Development Federation of India Limited (TRIFED), was set up in 1987 as a national level apex body under the Multi State Cooperative Societies Act, 1984 (MSCS Act, 1984).

After the enactment of the Multi State Cooperative Societies Act, 2002 (MSCS Act, 2002) TRIFED is deemed to be registered under the latter Act and is also listed in the Second Schedule to the Act as a National Cooperative Society.

The Bye-laws of TRIFED were revised in April 2003 in tune with the new Multi State Co-operative Societies Act, 2002 read with the Multi State Co-operative Societies Rules, 2002. As per the revised Bye-laws, the main objective of TRIFED is to serve the interest of its members in more than one State for the social and economic betterment of its members by conducting its affairs in a professional, democratic and autonomous manner through self help and mutual cooperation for undertaking marketing development of tribal products.

Rehabilitation of Project Affected ST-Families : A National Policy on the Resettlement and Rehabilitation of Project Affected Families has been formulated and circulated by the Ministry of Rural Development during February 2004. The Policy is in the form of broad guidelines and executive instructions for guidance of all concerned. It is applicable to projects displacing 500 families or more enmasse in plain areas, and 250 families enmasse in hilly areas, desert development programme blocks, areas mentioned in Schedule-5 and Schedule-6 of the Constitution of India.

The Ministry of Tribal Affairs has also circulated the Policy to all the States. In addition, the Ministry has formulated a 17-point format for preparation of Relief and Rehabilitation Plan by the Project Authorities in accordance with the Policy formulated by the Ministry of Rural development.

As per the Policy, the displaced Scheduled Tribe persons are eligible for special benefits in addition to the provisions made applicable for all displaced persons. The special provisions for the project affected ST families are as under: (i) Each Project Affected Family of ST category shall be given preference in allotment of land. (ii) Each tribal PAF shall be entitled to get R&R benefits mentioned under the policy. (iii) Each tribal PAF shall get additional financial assistance equivalent to 500 days minimum agriculture wages for loss of customary rights / usages of forest produce. (iv) Tribal PAFs will be resettled close to their natural habitat in a compact block so that they can retain their ethnic, linguistic and cultural identity. (v) Tribal PAFs shall get land free of cost for community and religious gathering. (vi) Tribal PAFs resettled out of the district / taluka will get 25 per cent higher R&R benefits in monetary terms. (vii) The tribal Land Alienated in violation of the laws and regulations in force on the subject would be treated as null and void and the R&R benefits would be available only to the original tribal land owner. (viii) The tribal families residing in the Project Affected Areas having fishing rights in the river / pond / dam shall be given fishing rights in the reservoir area. (ix) Tribal PAFs enjoying reservation benefits in the affected zone shall be entitled to get the reservation benefits at the resettlement zone.

However, as per the Constitution of India “Land and its Management” falls within the administrative jurisdiction of the States. The Ministry of Rural Development has been considering to amend the Land Acquisition Act of 1894 to have a Model Act.

Recognition of Forest Rights of STs: Tribals have been living in and around forests for centuries. These are their original habitats for generations from time immemorial. These Forest-Dwelling Scheduled Tribes (FDSTs) are integral to the forest bio-sphere. Unfortunately however the traditional rights of these FDSTs over the land occupied by them were not adequately recognised and recorded at the time of consolidation of State forests during the colonial period and subsequently, after Independence too.

The condition of FDSTs are becoming precarious day by day – owing to displacement threats in view of the ever-increasing demand for conservation of forests on the one hand, and tardy implementation of developmental activities meant for them. As they do not have a ‘legal’ home they do not have an address. As a result they cannot avail themselves of benefits under various schemes of the Government such as the “Indira Awas Yojana”.

The tribals inhabiting the forest villages do not get the benefit of various welfare schemes due to non-availability of title of land in their favour and the fact that in many cases the jurisdiction of the block and revenue authorities does not cover forest villages. The forest villages are those villages which were set up in remote and inaccessible forest areas during British period with a view to provide uninterrupted manpower for forestry operations. However, many of these villages are not revenue villages. There are around 3000 forest villages in the country. As a result, they face the threat of eviction. All these factors have resulted in historical injustice to them.

The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA) PESA gives the right of ownership of MFP to the respective local communities. The collection of MFP and its marketing thereof constitute the major source of livelihood for a majority tribal population.

However, despite the transfer of control and management of natural resources to the STs, the collection and trade in MFP, mainly Tendu leaves, is largely monopolised by Corporations of belonging to the Forest Departments of State Governments.

The Ministry of Environment and Forests have issued a circular on 5 February 2004 to all the State Governments / UTs to recognise the traditional rights of the tribal population on forest lands under the Forest (Conservation) Act, 1980 and to send their proposals to the Central Government for diversion of forest lands continuously occupied by any forest dwellers. The aim was to confer unfettered, heritable but inalienable rights over the forest land in respect of those tribal dwellers who are in continuous occupation of such forest land at least since 31 December 1993. However, due to some Court cases the matter is awaiting final judgments.

The Ministry of Tribal Affairs has accordingly formulated the Scheduled Tribes (Recognition of Forest Rights) Bill, 2005, to redress the historical injustice done to tribal community and for clear assertion of their legal rights to land. The proposed Bill inter-alia provides for the following matters, namely: (1) it reinforces and utilises the rich conservation ethos that tribal communities have traditionally shown and cautions against any form of unsustainable or destructive practices; (2) it lays down a simple procedure for recognition and vesting of forest rights in the forest dwelling Scheduled Tribes so that rights, which stand vested in forest dwelling tribal communities, become legally enforceable through corrective measures in the formal recording system of the executive machinery; (3) it provides for adequate safeguards to avoid any further encroachment of forests and seeks to involve the democratic institutions at the grassroots level in the process of recognition and vesting of forest rights; (4) it addresses the long standing and genuine felt need of granting a secure and inalienable right to those communities whose right to life depends on right to forests and thereby strengthening the entire conservation regime by giving a permanent stake to Scheduled Tribes dwelling in the forests for generations in symbiotic relationship with the entire ecosystem.

The draft Bill formulated by the Ministry was approved by the Cabinet in its meeting held on 1 December 2005. While approving the draft Bill, the Cabinet also decided that a Group of Ministers be constituted to (a) harmonise the issues brought up during discussions in the Cabinet: and (b) to consider official amendments to the Bill.

After Cabinet's approval the Ministry introduced the Scheduled Tribes (Recognition of Forest Rights) Bill, 2005 in the Lok Sabha on 13 December 2005. The Bill recognises the rights of forest dwelling Scheduled Tribes relating to their (a) tenurial security, providing them a great relief against the physical and psychological alienation of land belonging to them; (b) livelihood, in terms of subsistence agriculture and ownership of minor forest produce, including rights to collect, trade and process the same, and (c) traditional and customary rights.

The Scheduled Tribes (Recognition of Forest Rights) Bill, 2005 as introduced in the Lok Sabha on 13 December 2005 was referred to a Joint Committee of Parliament. The Joint Committee of Parliament has since presented its report to the Lok Sabha on 23 May 2006, which was also laid on the Table of the Rajya Sabha on the same day. The Joint Committee has made several amendments to the Bill introduced in the Lok Sabha on 13 December 2005 and reported a revised Bill titled "The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Bill, 2006". The Group of Ministers constituted by the Cabinet Secretariat is now seized of the recommendations made by the Joint Parliamentary Committee. The Ministry would take further action in the matter on receipt of recommendations of the GoM.

NATIONAL TRIBAL POLICY

The Ministry of Tribal Affairs has formulated the draft of a National Tribal Policy covering various issues such as Alienation of Tribal Land; Tribal-Forest Interface; Displacement, Rehabilitation and Resettlement; Enhancement of Human Development Index; Creation of Critical Infrastructure; Violent Manifestations; Conservation and Development of Particularly Vulnerable Tribal Groups (PTGs); Adoption of Tribal Sub Plan Strategy; Empowerment; Gender Equity; Enlisting Support of Non-Governmental Organisations; Tribal Culture and Traditional Knowledge; Administration of Tribal Areas; the Regulatory and Protective Regime; Scheduling and De-Scheduling of Tribes, etc. The draft Policy was made available to members of the public through the Ministry's website and copies were sent to Central Ministers. State / UT Governments, the Central Ministries / Departments concerned, academicians, anthropologists, social activists, experts working for the welfare of tribal people, and other stakeholders, inviting views, comments and suggestions. The Ministry has received an enthusiastic response from various stakeholders and is in the process of examination of the same and hopes to finalise the draft National Tribal Policy at the earliest.

WELFARE OF OTHER BACKWARD CLASSES

The Other Backward Classes (OBC) constitutes estimated 52 per cent of population as per Second Report of Backward Classes popularly known as Mandal Report. After the Mandal Judgement in 1992 the OBCs started getting various benefits for their educational development, economic development and reservation in services.

STATUTORY BODY

National Commission for Backward Classes : In pursuance of the Supreme Court Judgement popularly known as Mandal Judgement (1992), the National Commission for Backward Classes was set up in 1993 as a permanent body for entertaining, examining and advising the Government on requests for inclusion and complaints of over-inclusion and under inclusion in the lists of Other Backward Classes (OBCs) of citizens. As per the provision of the Act, the advice tendered by the Commission shall ordinarily be binding upon the Government.

EDUCATIONAL DEVELOPMENT

Pre-matric Scholarships for OBCs : The Scholarships are awarded to the students belonging to OBCs whose parents' / guardians' income from all sources does not exceed Rs 44,500 per annum. The scholarships are given to the students in class I or any subsequent class of pre-matric stage in the case of day scholars and class III or any subsequent class of pre-matric stage in the case of hostellers. The scholarship will terminate at the end of class X. The duration of the scholarship in an academic year is 10 months. The scholarship is tenable in such institutions and for such pre-matriculation courses, which have been duly recognised by the concerned State Government and Union Territory Administration. Under the scheme, 50 per cent Central assistance is provided to the State Governments and 100 per cent in case of UTs over and above the committed liability. An amount of Rs. 25.27 crores was released under the scheme to 12 states during 2006-07 for covering 9,57,338 beneficiaries.

Post-Matric Scholarships for OBCs : The objective of the scheme is to provide financial assistance to the OBC students studying at post-matriculation or post secondary stage to enable them to complete their education. These scholarships are

available for studies in India only and awarded through the State Governments / UT Administrations to which the applicant actually belongs. These scholarships are given for study in recognised institutions. Unemployed students whose parents / guardians income from all sources does not exceed Rs. 44,500 per annum are entitled for scholarships under the scheme. Under the Scheme, 100 per cent Central assistance is provided to State Governments / UT Administrations over and above the committed liability. An amount of Rs. 55.73 crores was released under the scheme to 16 states / UTs for covering 4,16,765 beneficiaries during the year 2006-07.

Hostels for OBC Boys and Girls : The scheme aims at providing better educational opportunities to students belonging to socially and educationally backward classes notified as such in the Central / State / UT lists of OBCs, generally referred to as Other Backward Classes (OBCs). Under the scheme, 50 per cent Central assistance is provided to the States and 100 per cent to UTs for constructions of hostels. These hostels are constructed for middle, secondary, college and university level students. The expenditure on procurement of land, staffing and other maintenance shall be borne by the State Governments / UT concerned. During 2006-07 an amount of Rs 19.58 crore was released 11 States / UTs for construction of 82 hostels and for covering 4520 OBCs inmates.

Assistance to Voluntary Organisations for Welfare of OBCs : The objective of the scheme is to involve the voluntary sector for improving the educational and socio-economic conditions of the OBCs through skill upgradation and enables them to start income generating activities on their own or get gainfully employed. Under the Scheme, 90 per cent of approved expenditure in form of grant-in-aid is given to NGOs for running vocational training courses such as carpentry, computer, craft, electrician, motor winding and fitting, photography, printing, composing and bookbinding, type and shorthand and welding and fitter training, etc. An amount of Rs 2.22 crore was released in 2006-07 to 85 NGOs so as to benefit 4316 OBC beneficiaries.

ECONOMIC DEVELOPMENT

National Backward Classes Finance and Development Corporation : The National Backward Classes Finance and Development Corporation (NBCFDC) provides credit facilities to beneficiaries whose annual income is less than double the poverty line for various income generation activities including implementation of Mahila Samridhi Yojana. The corporation extended credit facilities to 1,32,108 beneficiaries.

RESERVATION IN SERVICES

Reservation is given to Scheduled Castes (SCs), Scheduled Tribes (STs) and Other Backward Classes (OBCs) in services under the control of Government. Reservation is also provided to persons with disabilities and the ex-servicemen in certain categories of posts. The quantum of reservation for SCs, STs, and OBCs in direct recruitment on all-India basis by open competition is 15 per cent, 7.5 per cent and 27 per cent respectively. In direct recruitment on all-India basis otherwise than by open competition, reservation is 16.66 per cent for SCs, 7.5 per cent for STs and 25.84 per cent for OBCs. In case of promotion SCs and STs get reservation at the rate of 15 per cent and 7.5 per cent respectively. There is no reservation for OBCs is case of promotion. Three per cent of vacancies are kept reserved for persons with disabilities. Ten per cent of the vacancies in the posts of the level of Assistant Commandant in all para-military forces, 10 per cent of the vacancies in Group-C posts and 20 per cent of the vacancies in Group-D posts are reserved for the ex-servicemen.

Article 341 and 342 of the Constitution define as to who would be the SCs and the STs with respect of any State or Union Territory. The Government has prepared a list of OBCs has been prepared by the Government. The inter-state area restrictions have been imposed so that the people belonging to the specific community residing in a specific area which has been assessed to qualify for SC, ST and OBC status only benefit from the facilities provided for them. Definition of 'ex-servicemen' for the purpose of getting reservation in services is contained in Ex-servicemen (Re-employment in Civil Services and Posts) Rules, 1979 and conditions for reservation to persons with disabilities are given under the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.

To ensure that reserved vacancies are filled by candidates belonging to appropriate category, certain relaxations and concessions like relaxation in upper age-limit, etc., are provided. Liaison officers have been appointed for SCs / STs and OBCs in each Ministry / Department to ensure proper implementation of reservation policy for them.

The representation of SCs / STs and OBCs in Central Government services as on 1 January 2005 is given below:

Group	Total	SCs	%	STs	%	OBCs	%
A	80,589	9,551	11.9	3,448	4.3	3,791	4.7
B	1,39,958	19,194	13.7	6,230	4.5	3,252	2.3
C	20.36,103	3,33,708	16.4	1,31,678	6.5	1,19,968	5.9
D (Excluding Sweepers)	7,67,224	1,40,469	18.3	55,032	6.9	32,973	4.3
Sweepers	8,1174	48,067	59.2	4,012	4.9	1,834	2.3
Total (Excluding Sweepers)	30,23,874	5,02,922	16.63	1,94,388	6.43	1,59,984	5.29
Total (Including Sweepers)	31,05,048	5,50,989	17.74	1,98,400	6.39	1,61,818	5.21

Note : This does not include information in respect of two Ministry.

The Scheme of reservation is being followed by public sector undertakings including nationalised public sector banks. State governments have also provided for reservation of posts for SCs, STs and OBCs, etc., and have taken steps to increase their representation in State services. Reservation in State government services, however, is under the exclusive jurisdiction of respective State Governments.

WELFARE MEASURE FOR THE MINORITIES

Five religious communities viz Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis) have been notified as minorities as per provision under the National Commission for Minorities (NCM) Act-1992. These five communities constitute about 18.47 per cent of the country's population. The Government has taken the following measures for welfare of Minorities:

CONSTITUTIONAL MEASURES

National Commission for Minorities : The National Commission for Minorities (NCM) was set up as a Statutory body in 1993 through the enactment of National Commission for Minorities Act, 1992. In November 2004, it was decided to amend the Constitution to grant constitutional status to the NCM. Accordingly, the Government introduced a Constitution (One hundred and Third Amendment) Bill, 2004 and National Commission for Minorities (Repeat) Bill, in the Lok Sabha on 23 December 2004. The National Commission for Minorities is responsible to safeguard the interests of minorities, which broadly relates to atrocities by the police, service matters, minority educational institutions and disputes relating to religious places. After taking cognizance of the complaints, reports are called for from the concerned authorities. On receipt of the reports, the Commission make appropriate recommendations to the concerned authorities.

National Commission for Religious and Linguistic Minorities : The Government of India has been seized of the welfare needs of socially and economically backward sections among religious and linguistic minorities. For having a detailed examination to determine the criteria for identifications of socially and economically backward sections among religious and linguistic minorities and to suggest measures for their welfare, the Government has constituted a National Commission for Religious and Linguistic Minorities, with the following terms of reference: (a) to suggest criteria for identification of socially and economically backward sections among religious and linguistic minorities; (b) to recommend measures for welfare of socially and economically backward sections among religious and linguistic minorities, including reservation in education and government employment; (c) to suggest the necessary constitutional, legal and administrative modalities, as required for the implementation of their recommendations; and to present a Report of their deliberations and recommendations.

The Commission has started functioning since 21 March 2005.

THE CENTRAL WAKF COUNCIL

A Wakf is a permanent dedication of movable or immovable properties for purposes recognised by the Mulsim Law as religious, pious or charitable. Apart from these religious aspects, the Wakfs are also instruments of social and economic upliftment. Administration of Central Legislation for Wakfs is the responsibility of the Ministry of Social Justice and Empowerment. For the purpose of advising it on matters relating to working of the Wakf Boards and the proper administration of Wakfs in the country, the Central Wakf Council was established as a statutory body by the Central Government in December, 1964 under Section 8A of the Wakf Act, 1954 (now read as Sub-Sec(1) of the Section 9 of Wakf Act, 1995). The present Council has been reconstituted on 18 March 2005. The Union Minister in charge of Wakf is the Chairperson of the Central Wakf Council. The Central Wakf Council is also playing a vital role in the development of the society by way of implementing the following schemes: (i) Development of Urban Wakf Properties; (ii) Educational Development Programmes

Special Officer for Linguistic Minorities : The Office of the Special Officer for Linguistic Minorities (commonly known as the Commissioner for Linguistic Minorities) was created in July 1957, in pursuance of the provision of Article 350-B of the Constitution. The Commissioner for Linguistic Minorities of India (CLM) has his Headquarters at Allahabad with Regional Offices at Kolkata, Belguam and Chennai.

The CLM takes up all the matters pertaining to the grievances arising out of the non-implementation of the Constitutional and Nationally Agreed Scheme of Safeguards provided to linguistic minorities that come to its notice or are brought to its knowledge by the linguistic minority individuals, groups, associations or organisations at the highest political and administrative levels of the State Governments and UT Administrations and recommends remedial actions to be taken.

ECONOMIC DEVELOPMENT

National Minorities Development and Finance Corporation : National Minorities Development and Finance Corporation (NMDFC) provides concessional finance for self-employment activities to eligible beneficiaries belonging to minority communities having family income below double the poverty line. The authorised share capital of the corporation has been enhanced from Rs 500 crore to Rs 650 crore.

EDUCATIONAL DEVELOPMENT

Maulana Azad Education Foundation : Maulana Azad Education Foundation is a registered society with the objectives of promoting education amongst the educationally backward sections of the society, and minorities in particular. The Government of India provides corpus fund to the Foundation. Keeping in view the overwhelming response to the educational schemes of the Foundation from all over the country, the Government is considering augmentation of its corpus fund from Rs 70.00 crores to Rs 100 crores.

Three new schemes viz., Maulana Azad Sadbhawna Kendra, Maulana Azad National Scholarship for Meritorious Girls Students and Maulana Azad Literacy Award are being implemented from the current year. During the year the Foundation has sanctioned scholarship of Rs 10,000 each to 2774 girl students from 22 States. For the first time 300 scholarship were distributed in the state of Jammu and Kashmir. Under the scheme of Maulana Azad Sadbhawna Kendra the Foundation has sanctioned four projects in the state of Madhya Pradesh.

WELFARE OF PERSONS WITH DISABILITIES

For the marginalised sections of the society National Policy for Persons with Disabilities has been finalised in 2005. The policy focuses on the prevention of disabilities, the physical and economic rehabilitation measures for disabled persons. The policy is to be implemented by Government and other agencies. Various steps had also been taken in the past for welfare and rehabilitation of persons with disabilities.

PERSONS WITH DISABILITIES ACT, 1995

A comprehensive law, namely, the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 has been enacted and enforced in February 1996. The law deals with both prevention and promotion aspects of the rehabilitation such as education, employment and vocational training, creation of barrier-free environment, provision of rehabilitation services for persons with disabilities, institutional services and supportive social security measures like unemployment allowance and grievance redressal machinery both at the Central and State-Level.

National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities: The National Trust is a statutory body under

"The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999". The main objectives of the Trust are to enable and empower persons with these disabilities to live independently as fully as possible, to extend support to registered organisations providing need-based services and to evolve procedure for appointment of legal guardians for persons with disabilities requiring such protection. During the year 384 awareness camps were held and 79,300 and professionals were given counseling.

Office of the Chief Commissioner for Persons with Disabilities : The Chief Commissioner is an important statutory functionary, appointed under Section 57 of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. The functions and duties of the Chief Commissioner include coordinating the work of State Commissioners for persons with disabilities, monitoring of utilisation of funds disbursed by the Central Government, taking steps to safeguard rights and facilities made available to persons with disabilities and also to look into complaints with respect to deprivation of rights of persons with disabilities.

The Chief Commissioner can also take suo motu notice of non-implementation of any Rule. Law, etc, meant for persons with disabilities and is vested with the powers of a civil court relating to summoning of witness, discovery, requisitioning and production of any document, etc.

REHABILITATION COUNCIL OF INDIA

The Rehabilitation Council of India is a statutory body set up under the Rehabilitation Council of India Act, 1992. The Council is responsible for regulating the training policies and programmes for various categories of professionals in the area of rehabilitation and special education. Its functions include: (i) standardisation and regulation of training courses at different levels in all the training institutions throughout the country, (ii) recognition of institutions / universities running training courses in the area of rehabilitation of the disabled within and outside the country on a reciprocal basis, (iii) promotion of research in rehabilitation and special education, (iv) maintenance of a Central Rehabilitation Register for professionals possessing the recognised rehabilitation qualifications in the area of rehabilitation and (v) encouragement of Continuing Rehabilitation Education programmes in collaboration with organisations working in the area of disability.

NATIONAL INSTITUTES

In order to effectively deal with the multi-dimensional problem of the disabled population, the following National Institutes / apex level Institutes have been set-up in each major area of disability; (i) National Institute for the Visually Handicapped, Dehradun, (ii) National Institute for Orthopedically Handicapped, Kolkata, (iii) Ali Yavar Jung National Institute for the Hearing Handicapped, Mumbai, (iv) National Institute for the Mentally Handicapped, Secunderabad, (v) National Institute of Rehabilitation Training and Research, Cuttack, (vi) Institute for the Physically Handicapped, New Delhi, (vii) National Institute for Empowerment of Persons with Multiple Disabilities, Chennai. These institutes are mainly responsible for conducting innovative researches, organise training programmes for manpower development and deliver services in the country.

Artificial Limbs Manufacturing Corporation of India : The Artificial Limbs Manufacturing Corporation of India (ALIMCO), Kanpur is a public sector body,

engaged in manufacturing of aids and appliances for persons with disabilities. The products manufactured by the Corporation conform to ISI standards approved by the Bureau of Indian Standards. Marketing of products is done through Regional Marketing Centres at Kolkata, Mumbai, Chennai, Bhubaneswar and Delhi and also through National Institutes, voluntary organisations, 65 the corporation has manufactured aids and appliances.

Composite Regional Centres and Regional Rehabilitation Centre : Five Composite Regional Centres (CRCs) for the Persons with Disabilities are located at Srinagar, Lucknow, Bhopal, Sundernagar and Guwahati. These centres conduct training programmes to prepare professionals in the field of rehabilitation as well as provide rehabilitation services to the disabled. Four Regional Rehabilitation Centres for Spinal Injuries and other Orthopaedic Disabilities at Mohali, Cuttack, Jabalpur and Bareilly are providing services for basic management and follow-up of the spinally injured so as to make the affected persons functionally independent.

ECONOMIC DEVELOPMENT

National Handicapped Finance and Development Corporation : The National Handicapped Finance and Development Corporation (NHFDC) is an apex-level financial institution for extending credit facilities to persons with disabilities for their economic development. Funds assistance is disbursed through the channelising agencies authorized by the State Governments / UT Administrations and Non-Government Organisations. It also extends loans for pursuing education at graduate and higher levels. Besides, it assists in the upgradation of technical and entrepreneurial skills to enable beneficiaries to manage their production units efficiently.

Scheme for Assistance to Disabled Persons for Purchase / Fitting of AIDs and Appliances : The objective of the Scheme is to assist needy and disabled persons in procuring-durable, sophisticated and scientifically manufactured, standard aids and appliances that can promote their physical, social and psychological rehabilitation by reducing the impact of disability and enhancing their economic potential. The scheme is implemented through agencies like voluntary organisations, National Institutes under the Ministry, ALIMCO, Zila Panchayats, DRDAs, etc. The implementing agencies are provided grant-in-aid for purchase, fabrication and distribution of aids and appliances. The scheme also includes under its ambit medical / surgical correction and intervention that may be essential prior to figment of aids and appliances.

SOCIAL DEFENCE

In the areas of Social Defence the Ministry is committed towards welfare of Older Persons and rehabilitation of Drug Addicts. The programmes for the targeted groups are as follows :

National Policy for Older Persons : The National Policy for Older Persons (NPOP) was announced in January 1999, with the primary objective viz., to encourage individuals to make provision for their own as well as their spouse's old age; to encourage families to take care of their older family members; to enable and support voluntary and non-governmental organisations to supplement the care provided by the family; to provide care and protection to the vulnerable elderly people, to provide health care facility to the elderly; to promote research and training facilities to train geriatric care givers and organisers of services for the elderly; and to create awareness regarding elderly persons to develop themselves into fully independent citizens.

National Council for Older Persons (NCOP) : The Government has re-constituted a National Council for Older Persons (NCOP) to advise and aid the Government on developing policies and programmes for older persons. It provides feedback to the Government on the implementation of the National Policy on Older Persons and the specific initiatives for older persons. The NCOP is the highest body to advise and coordinate with the Government in the formulation and implementation of policy and programmes for the welfare of the aged.

Integrated Programme for Older Persons : Under this scheme, financial assistance upto 90% of the project cost is provided to NGOs for establishing and maintaining old age homes, day care centers, Mobile Medicare Units and to provide non-institutional services to older persons.

Prevention and Rehabilitation of Drug Addicts / Alcoholics : Under the Scheme, grant-in-aid to the extent of 90 per cent (95 per cent in North East States, J and K and Sikkim) of the expenditure is provided to voluntary organisations for rehabilitation of drug addicts and alcoholics.

Assistance to Voluntary Organisation for Social Defence Services : It provides for undertaking programmes for the rehabilitation of various social segments at risk not currently covered under the existing schemes of the Ministry. In particular the scheme provides for Pilot Projects in unchartered areas in which the Ministry may like to formulate independent programmes in due course. A number of programmes are being supported for rehabilitation of children of sex workers. Initiatives have also been taken to support projects for rehabilitation of widows and for providing counselling and support to traumatised children and women particularly those who have been victims of physical violence and sexual abuse.

WOMEN AND CHILD DEVELOPMENT

1. INTRODUCTION

Women and Children (0-14 years) consititute roughly 67% of the Indian population as per 2001 census. While women (including female child 0-14 years) consititute 48% of total population, the children (male and female 0-14 years) consititute 35% of total population. The development of women and children is of paramount importance and sets the pace for overall development. Earlier there was a separate Department of Women and child Development functioning as a part of Ministry of Human Resources Development since 1985 to look into matters related to Women and Children. Keeping in view its importance, a separate Ministry of Women and Child Development came into existence from 30th January 2006. Vide Government notification dated 16.2.2006, all subjects relating to Child Welfare / Protection like the Juvenile Justice (Care and Protection of Children) Act 2000, Central Adoption Resource Agency (CARA) and adoption which were earlier under Ministry of Social Justice and Empowerment have been transferred to the newly created Ministry of Women and Child Development.

2. VISION

The **Vision** of Ministry of Women & Child Development is ''Ensuring overall survival, development and protection of women and children of the country to enable them to lead productive and wholesome lives as citizens.'' The Ministry has evolved policies, plans of action, legislations, programmes and schemes for advancement of women and children and has been implementing these with the support of State Governments, other Government agencies and voluntary sector.

3. STATUTORY BODIES AND AUTONOMOUS ORGANISATIONS

The Ministry has under its aegis two statutory bodies and four autonomous organizations, viz., **(a) Statutory Bodies :** National Commission for Women, National Commission for Protection of Child Rights; **(b) Autonomous Organisations :** National Institute of Public Cooperation and Child Development (NIPCCD), Central Social Welfare Board (CSWB), Rashtriya Mahila Kosh (RMK) and Central Adoption Resource Agency (CARA). While NIPCCD, RMK and CARA are registered under the Societies Registration Act, 1960, the CSWB is a charitable company registered under Section 25 of the Companies Act, 1956. The National Commission for Women has been constituted as a national apex statutory body in 1992 under the National Commission for Women Act, 1990. The National Commission for Protection of Child Rights has been set up in 2007 under the Commission for Protection of Child Rights Act (number 4 of 2006) and its amendment notified on 20th Jan., 2006 and 29th December, 2006 to look into all matters relating to children in a holistic manner.

4. FOOD AND NUTRITION BOARD

The Food and Nutrition Board (FNB), a ministerial wing of the Ministry of Food, was transferred to the Ministry of Women and Child Development on 1 April, 1993 in pursuance of the National Nutrition Policy, as per the directives of the Prime Minister. A National Nutrition Mission has been set up and notified on 31 July, 2003 to address the problem of nutrition in a comprehensive manner.

Nutrition education and awareness generation are the important activities of Food and Nutrition Board. It undertakes nutrition advocacy, orientation training of field personnel and awareness generation of the public on various aspects of nutrition. National guidelines on Infant and Young Child Feeding 2006 have been developed and disseminated widely to improve nutrition of infants and young children. A comprehensive approach for addressing micronutrient malnutrition which involves dietary diversification, nutrient supplementation, food fortification and public health measures has been recommended by a Committee of Secretaries for the XI Five Year Plan. Awareness generation on nutrition through nutrition demonstration programmes, exhibitions, audio-video software, radio sponsored programme, video films on nutrition and informative advertisements in national and regional dailies is undertaken by FNB and its field infrastructure.

5. ACTS RELATING TO WOMEN AND CHILDREN

The Ministry is in charge of the administration of the following Acts relating to women and children: (a) The Immoral Traffic (Prevention) Act, 1956 (as amended in 1986) (b) The Indecent Representation of Women (Prevention) Act, 1986 (60 of 1986) (c) The Dowry Prohibition Act, 1961 as amended in 1986 (d) the Commission of Sati (Prevention) Act, 1987 (3 of 1988) (e) The prohibition of Child Marriage Act 2006 (notified in January 2007) (f) Protection of Women from Domestic Violence Act 2005, (g) National Commission for Women Act 1990 (h) Infant Milk Substitutes, Feeding Bottles and Infant Food (regulation of Production, Supply and Distribution) Act, 1992 (41 of 1992) (i) Commission for Protection of Child Rights Act 2005 and (j) Juvenile Justice (Care and Protection of Children) Act 2000.

In addition, the Ministry is responsible for International Cooperation in matters relating to Women and Children.

6. SCHEMES FOR WOMEN

The Ministry is implementing the following schemes for women :

ECONOMIC EMPOWERMENT SCHEMES

6.1 Step : Support to Training and Employment Programme for Women (STEP) was launched as a Central Sector Scheme in 1987. It has made a significant impact on women in traditional sectors by upgrading skills and providing employment on project basis by mobilizing them into viable groups, arranging for marketing linkages, support services and access to credit. The Scheme covers traditional sectors of employment such as agriculture, Animal Husbandry, Dairying, Fisheries, handlooms, handicrafts, Khadi and Village Industries and Sericulture. The scheme is being implemented through Public Sector Organisations, State Corporations, DRDAs, Cooperatives, Federations and registered Voluntary Organisations which have been in existence for a minimum period of three years.

6.2 Swayamsidha : Swayamsidha is an integrated scheme for the development and empowerment of women. The long-term objective of the scheme is to achieve all-round empowerment of women, especially, socially and economically, by ensuring their direct access to, and control over, resources through a sustained process of mobilization and convergence of all the on-going sectoral programmes. The immediate objectives are establishment of Self Help Groups, creation of confidence and awareness among members of Self Help Groups regarding the status, health, nutrition and education of women, sanitation and hygiene, legal rights etc. strengthening the savings habit of rural women and their control over economic resources, improving access to micro-credit, involving women in local planning and convergence of services of Ministry of WCD and other departments.

The scheme was launched in 2001-01 covering 650 blocks in the country including 238 IMY blocks in 335 districts. Each block consists of 100 Self Help Groups in 31 States / UTs. The programme is being implemented and SHGs are formed by the ICDS machinery in most of the States. A few States such as Uttar Pradesh, Uttaranchal, Tamil Nadu, Bihar etc. take help from NGOs for the purpose. Over 69,156 women's Self Help Groups have been formed under the scheme covering 10.02 lakh women members. An amount of Rs. 124.94 crores have been saved by SHGs formed under the scheme. 64, 649 SHGs have accounts in banks. 27,755 SHGs have availed loans from banks to the tune of Rs. 127.38 crores. 46,956 SHGs (72%) constituting over 5.07 lakh women are engaged in Income Generation Activities (IGA). 39,293 SHGs (60%) are benefiting from convergence with other Government schemes. The SHGs have created over 3654 community assets.

SOCIAL EMPOWERMENT SCHEMES

6.3 Swadhar : The Swadhar Scheme was launched by the Department during the year 2001-2002 as a Central Sector Scheme for providing holistic and integrated services to women in difficult circumstances, such as destitute widows deserted by their families in religious places like Vrindaban and Kashi, women prisoners released from jail and without family support; women survivors of natural disasters who have been rendered homeless and are without any social and economic support, trafficked women / girls, rescued or runaway from brothels or other places or victims of sexual crimes, who are disowned by family or who do not want to go back to their family for various reasons, women victims of terrorist violence who are without any

family support, mentally challenged women who are without any support of family or relatives etc.

The package of services made available under the Scheme include provision for food, clothing, shelter, health care counseling and legal support, social and economic rehabilitation through education, awareness generation, skill up gradation and behavioral training. The scheme also supports a Help-line for women in distress.

The project is implemented through Social Welfare / Women and Child Development Department, Women's Development Corporation, Urban Local Bodies, reputed Public / Private Trust or Voluntary organisations etc. provided they have the needed experience and expertise in the rehabilitation of such women.

6.4 Short Stay Homes : The Scheme of Short Stay Homes was launched in the year 1969 with the objective to protect and rehabilitate those women and girls who are facing social, economic and emotional problems due to family stress, social ostracism, moral danger, etc. The programme was transferred to CSWB for implementation w.e.f April 1999. Temporary shelter to the needy women and girls is given for 6 months to 3 years. Children accompanying the mother or born in the home may be permitted to stay in the home upto age of 7 years, after which they may be transferred to children institutions orprovided foster care services.

6.5 Family Counselling Centres : The objective of Family Counselling Centres is to provide preventive and rehabilitative services to women and children who are victims of atrocities and family mal-adjustments. The Family Counselling Centre (FCC) scheme is being implemented through Central Social Welfare Board (CSWB) since 1984 through voluntary organizations. Family Counselling Centres are also being run for special categories of clients such as at police headquarters, FCCs in Mahila Jails, Rape Crisis Intervention Centres and Pre-Marital Counselling Centres. Women's organizations and other voluntary social welfare organizations engaged in work relating to women issues can avail grants from CSWB for setting up Family Counseling Centres.

6.6 Condensed Courses of Education of Women : The scheme of Condensed Courses of Education is implemented through the Central Social Welfare Board and aims at facilitating social and economic empowerment of women and providing them with education and relevant skills. The scheme is specially designed to help dropouts and failed candidates to complete their school education. Women of the age of 15 years and above are the targeted beneficiaries under the scheme. Registered Social Welfare Organisations having experience in educational programmes and recognized educational institutions can apply for assistance. The scheme can also be run in aftercare homes and custodial institutions for women.

6.7 Awareness Generation Programme for Rural and Poor Women : The Central Social Welfare Board is implementing this programme with the aim of creating awareness in the community on issues relating to status, rights and problems of women. Registered voluntary organizations are eligible to apply under the scheme.

SUPPORT SERVICES FOR WOMEN

6.8 Working Women's Hostel : The scheme of assistance for construction or expansion of hostel buildings for working women with day care facilities for children is being implemented since 1972-1973. Under this scheme, assistance is provided to non-governmental organizations, cooperative bodies and other agencies engaged in the field of women's welfare, women's education, public sector undertakings, women's

development corporations, local bodies, universities, state governments, etc, for construction of buildings for Working Women's Hostels. This scheme envisages provision of safe and affordable accommodation to working women (single working women, women working at places away from their home-towns, working but husband out of town, widows, divorcees, separted women, etc.) and women being trained for employment and girl students studying in post-school professional courses. Trainees are permitted to stay for a period upto one year and girl students for a period upto five years, but with the condition that first preference would be given to working women. It is also stipulated in the scheme guidelines that the category of women who are being trained for employment and girl students should not exceed 30 per cent of the total number of Women in hostel.

OTHER INITIATIVES

6.9 Prevention of trafficking in women and children : The Ministry of Women and Child Development has formulated a National Plan of Action to Combat Trafficking and Commercial Sexual Exploitation of Women and Children in 1998, with the objective to mainstream and reintegrate the women and child victims of commercial sexual exploitation in society. The Ministry has issued guidelines to the States for the implementation of National Plan of Action. Under the National Plan of Action, Central and State Advisory Committees have been formed. The Ministry of WCD is organizing regional and nation wide consultations with the view to update the existing plan of action and make it more comprehensive to cover "Trafficking in persons" for any purpose. Training and capacity building efforts are being undertaken and also wide dissemination of women helping numbers. A didicated nodal cell in theMinistry of Home Affairs has been set up for prevention of trafficking.

6.10 Gender Budgeting Initiatives of the Ministry of Women and Child Development : Gender Budgeting is the application of gender mainstreaming in the budgetary process. It encompasses incorporating a gender perspective at all levels and stages of the budgetary process, and paves the way to translating gender commitments to budgetary commitments and carrying out an assessment ofthe budget to establish its gender differntial impact.

The Ministry adopted in 2004-05, the mission statement of 'Budgeting for Gender Equity' and also framed the Strategic Framework of Activities to implement this mission. In 2005-06 and 2006-07 extensive work for training, capacity building, advocacy, awareness generation and sensitization and Gender Out come Assessement were undertaken. The Ministry of Women and Child Development being the nodal Ministry for Gender Budgeting is proposing to set up a full fledged Gender Budgeting Bureau with appropriate staff and infrastructural facilities. The Ministry is also planning to set up Regional Resource and Training Centers for Gender Budgeting as well as Preparation of Training Manuals.

6.11 Grant-in-aid for Research, Publication and Monitoring : The Ministry promotes research studies for development of innovative programmes, for testing the feasibility and efficiency of programmes and services and on emerging issues in the field of women and child development. It also supports workshops and seminars, which help in formulating research proposals, disseminating research findings or in social situational analysis which are likely to be helpful in planning, programming and review of implementation.

6.12 National Policy on Empowerment of Women : The objective of the National policy for Empowerment adopted by the Government on 20 March 2001 is to bring

about the advancement, development and empowerment of women and to eliminate all forms of discrimination against women and to ensure their active participation in all spheres of life and activities. A National Plan of Action proposes to translate this policy into achievable goals.

6.13 Protection of women from Domestic Violence Act 2005 (number 43 of 2005): A new law on the protection of women from domestic violence has been enacted and brought into operation from 26.10.2006.

6.14 Convention on Elimination of Discrimination against Women (CEDAW) : India signed the Convention on Elimination of Discrimination against Women (CEDAW) on 30th July 1980 and ratified it on 9th July 1993 with one reservation and two declaratory statements. The convention obligates the State parties to undertake appropriate legislative and other measures to eliminate discrimination against women and for guaranteeing them the exercise and enjoyment of human rights and fundamental freedom on the basis of equality with men. The First Report was submitted (on 21st October) in 1997 and was considered (on 24th and 30th) in June 2000. A combined 2nd and 3rd Periodic Report was submitted in June 2005. The UN Committee on CEDAW considered the Report on 18th January 2007.

6.15 Beijing Platform for Action : The Fourth World Conference on Women, held in Beijing in 1995 was a landmark event that set the pace for women's empowerment when a Declaration and Platform for Action (BPFA) were adopted. BPFA has identified 12 critical areas of concern for women. India adopted both without any reservations. The Committee on Status of Women reviews progress made by member countries in the critical areas. The 51st session of Committee on Status of Women was held from 26th February-9th March 2007 in New York.

6.16 : Stree Shakti Puraskar : As a measure of recognition of achievements of individual women in the field of social development, the Government of India has instituted five national awards, known as 'Stree Shakti Puraskar'. These awards will be in the name of the following eminent women personalities from Indian history, who are famous for their personal courage and integrity :

- Devi Ahilya Bai Holkar
- Kannagi
- Mata Jijabai
- Rani Gaidenlou Zeliang
- Rani Lakshmi Bai

The award carries a cash prize of Rs. 3 lakh and a citation.

7. PROGRAMMES FOR CHILDREN

7.1 Integrated Child Development Services (ICDS) Scheme : The Integrated Child Development Services (ICDS) Scheme was launched in 1975 as a Centrally Sponsored Scheme with the following objectives : (a) to improve the nutritional and health status of children below the age of six years and pregnant and lactating mothers; (b) to lay the foundation for the proper psychological, physical and social development of the child, (c) to reduce the incidents of mortality, morbidity, malnutrition and school drop-outs. (d) to achieve effective coordination of policy and implementation among various departments to promote child development, (e) to enhance the capability of the mother to look after the health and nutritional needs of the child through proper health and nutrition education. The Scheme provides for a package of services to

children below 6 years and pregnant women and lactating mothers, comprising (i) Supplementary nutrition (ii) Immunization, (iii) Health check-up, (iv) Referral services, (v) Pre-School non-formal education and (vi) Nutrition and Health education.

The Scheme guidelines envisage one rural / tribal project for a Community Development Block irrespective of number of villages / population in it, and one urban project for one lakh population. There is one Anganwadi Centre (AWC0 for 400-800 population, 2 AWCs for 800-1600 population, 3 AWCs for 1600-2400 population, thereafter 1 AWC in multiples of 800 population and 1 Mini-AWC for 150-400 population in rural / urban project. In respect oftribal / Riverine / Desert, Hilly and other difficult areas / projects there will be 1 AWC for 300-800 population, and 1 Mini-AWC for 150-300 population.

The Ministry of Women & Child Development is implementing the **Nutrition Programme for Adolescent Girls (NPAG)** on a pilot project basis in 51 identified districts across the country since 2005-06. undernourished Adolescent Girls in the age group 11-19 years (weight < 35 kg) are covered under the scheme. Free foodgrains @ 6 kg. per beneficiary per month, are provided to these undernourished adolescent girls. The programme has been operationalised through the administrative set up of ICDS at the state, district, block and Anganwadi Centre level. Allocation of funds for NPAG is made as Special Central Assistance (SCA), on 100% grant basis, to States / UTs. Foodgrains at Central IssuePrice (CIP) applicable to the BPL rates are provided by Department of Food & Public Distribution to the States / UTs for the programme. Earlier, the Planning Commission implemented the pilot project during 2002-03 & 2003-04.

Ministry of Women & Child Development is implementing **Kishori Shakti Yojana** for addressing the needs of self development, nutrition and health status, literacy and numerical skills, vocational skills etc. of adolescent girls in the age group of 11 to 18 years. The scheme is being implemented through the infrastructure of ICDS in 6118 ICDS projects. Under KSY, various programme options are available to the States / UTs to see-ectively intervene for the development of the adolescent girls on the basis of specific needs of the area. This scheme also seeks convergence with schemes of the Health Department in order to improve the nutritional and health status of the adolescent girls. Grant-in-aid @ of Rs. 1.10 lakh only per block per annum is released to the States / UTs for the implementation of KSY.

7.2 Rajiv Gandhi National Creche Scheme for the Children of Working Mothers: Rajiv Gandhi National Creche Scheme for the Children of Working Mothers was launched with effect from 1st january, 2006 by merging the National Creche Fund with the Scheme of Assistance to Voluntary Organisations for Creches for Working / Ailing Women's Children. The scheme is being implemented through the Central Social Welfare Board and two national level voluntary organisations, namely Indian Council for Child Welfare and Bhartiya Adim Jati Sevak Sangh. The scheme provides financial assistance of Rs. 42,384 / - per creche per annum, which includes honorarium for two creche workers @ Rs. 1000 / - per creche worker per month and supplementary nutrition of Rs. 2.08 per child per day for 25 children for 26 days in a month. User charges of Rs. 20 / - from BPL families and Rs. 60 / - from other families per month have also been introduced. The income eligibility limit of family has been enhanced from Rs. 1800 / - per month to Rs. 12,000 / - per month. According to the schematic pattern the implementing organisation receives 90 per cent of the total expenditure as grant except the honorarium of two creche workers. A non-recurring grant of

Rs. 10,000 / - per creche is sanctioned to the implementing organisation at the time of setting up of a creche.

The Scheme provides creche services to the children of age group of 0-6 years, which includes supplementary nutrition, emergency medicines and contingencies. The Scheme has an inbuilt component of monitoring of creches. State-wise independent monitoring agencies have been identified in consultation with the State Governments. A component for creche workers training has been added to the scheme to orient them to provide better services and to build a child friendly environment in the creche centers.

7.3 An Integrated Programme for Street Children : The objective of this Programme is to prevent destitution of children and facilitate their withdrawal from life on the streets. The programme provides for basic facilities like shelter, nutrition, health care, education, and recreation facilities to street children and seeks to protect them against abuse and exploitation. The target group of this programme is children without homes and family support who are driven to the streets and are especially vulnerable to abuse and exploitation. State gvernments, Union Territory Administrations, Local Bodeies, Educational Institutions and voluntary Organisations are eligible for financial assistance under this programme. Upto 90% of the cost of the project may be provided by the Government of India while remaining has to be borne by the Organisation / Institution concerned.

The main programme components are city level surveys, documentation of existing facilities and preparation of city level plan of action, contact programmes, offering counseling, guidance and referral services, establishement of 24 hours drop-in shelters; Non-formal education programmes, programmes aimed at health care and reducing the incidence of drug and substance abuse, HIV / AIDS, programmes for capacity building and for advocacy and awareness.

7.4 Childline Services : Childline having a dedicated number 1098 is a 24 hour toll free telephone service available to all children in distress or by adults on behalf of children in distress. At present, Childline is working in 73 cities. The basic objectives of Childline are to (i) respond to the emergency needs of the children in difficulty and refer him / her to such services as he / she is in need of; (ii) provide a forum for networking among Government agencies and non-Governmental agencies dedicated to the network of services in child care and protection, (iii) sensitize hospitals, medical personnel, police, municipal corporations etc. towards needs of children, ensure protection of rights of the child, provide an opportunity to communities to respond to the needs of children in difficult circumstances.

7.5 Childline India Foundation : Childline operations are coordinated, monitored and expanded by Childline India Foundation, which is the umbrella organisation, set up by the Government of India. Childline India Foundation lays down minimum quality standards of the services provided to children.

7.6 Juvenile Justice (Care and Protection of Children) Act, 2000 : The Juvenile Justice (Care and Protection Children) Act, 2000 has been enforced in the entire country except the State of Jammu and Kashmir w.e.f. 1st April, 2001. The Act lays down the setting up of Juvenile Justice Boards consisting of a Metropolitan Magistrate / judical magistrate and two social workers one of which shall be a female social worker, in every district. The State governments are also required to set up for every district one or more child welfare Committees for discharging all functions regarding children in need of care and protection as laid down in the Act.

7.7 A programme for Juvenile Justice : The objectives of programme for Juvenile Justice are (i) to extend help to State Governments to bear the cost of infrastructure and services development under the Juvenile Justice Act; (ii) to ensure minimum quality standards in the juvenile justice services, (iii) to provide adequate services for prevention of social maladjustment and rehabilitation of socially maladjusted juveniles. Under the scheme, the Ministry provides 50 per cent assistance to State Governments and UT administrations for establishment and maintenance of various levels of institutions for juveniles in conflict with law and children in need of care and protection.

7.8 Integrated Child Protection Scheme : The Ministry has also initiated steps to formulate a comprehensive scheme, 'An integrated Child Protection Scheme' on the basis of wide spread consultations with the voluntary organizations, child welfare experts and State Governments. This scheme includes setting up of child protection units in each State and District with financial assistance from the Government of India for ensuring the implementation of the Act and coordination of other child protection related activities in these States / District. The scheme includes components for providing institutional as well as non-institutional support for children in difficult circumstances.

7.9 Scheme for Welfare of Working Children in Need of Care and Protection : The scheme implementation commenced in January, 2005. The objective of the scheme is to provide non-formal education, vocational training to working children to facilitate their entry / re-entry into mainstream education in cases where they have either not attended any learning system or where for some reason their education has been discontinued with a view to prevent their continued exploitation in future.

7.10 Scheme of Assistance to Homes (Shishu Greh) for Children to promote in-country adoption : The Ministry is implementing a scheme wherein CARA provides grant-in-aid to government Institutions and Non-Governmental Organisations for increasing and promoting adoptions within the country. The upper ceiling for annual grant-in-aid is Rs. 6.00 lakhs for adoption homes.

As a step towards promoting and strengthening in country adoption, CARA has initiated the process of setting up Voluntary Coordinating Agencies (VCAs). The VCAs are responsible for coordination of all matters relating to adoption in a State as also to promote in-country adoption. They also maintain list of prospective adoptive parents.

7.11 Prevention of female foeticide and child marriages : Crime and violence against the girl child starts even before she takes birth. This is evident from the incidence of female foeticide which has been increasing over the years denying the girl child the right to be born. The Ministry has suggested to Ministry of Health to strengthen the existing administrative, enforcement and monitoring provisions under the Pre Conception and Pre Natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994 and put in place such mechanisms that can tackle the problem of sex determination and foeticide in a more effective manner.

In order to prevent child marriages, the existing Child Marriage Restraint Act, 1929 was repealed and the Prohibition of Child Marriage Act 2006 was notified on 11th January 2007. This Act has provisions for enhancing punishment for offenders, and also for appointment of Prohibition Officers in the States to prevent child marriages.

7.12 Cooperation with Unicef : UNICEF programmes are being implemented in

India through a Master Plan of Operations (MPO), which is prepared after mutual consultation. The Ministry of Women and Child Development is the nodal Ministry for coordinating the implementation of the Master Plan of Operations. The Master Plan of Operations for 2003-2007 is currently in operation.

The MPO aims to achieve the following objectives : (a) to empower families and communities with appropriate knowledge and skills for the care and protection of children; (b) to expand partnerships as a way to leverage resources for children and scale up interventions, (c) to strengthen the evaluation and knowledge base of best practices on children. The programme contributes towards (a) reduction in infant and maternal moratality, (b) improvements in level of child nutrition, (c) ensuring universal elementary education, (d) enhancing child protection, (e) protection of children and adolescents from HIV / AIDS.

7.13 Assistance to Voluntary Organisations for providing Social Defence Services: Under the scheme, assistance is given to Voluntary organizations working in the field of child and women welfare for innovative projects and activities which are not covered in the existing schemes of the Ministry of Women and Child Development.

7.14 Children's Day : India observes Children's Day on 14 November every year. The Day enables us to review the progress made in attaining the decadal goals, identify gaps and constraints and work out strategies to reach the time-bound goals.

7.15 Convention on the Rights of the Child : India acceded to the UN Convention on the Rights of the Child on 11 December, 1992 to reiterate its commitment to the cause of children. The objective of the Convention is to give every child the right to survival and development in a healthy and congenial environment. The member countries that have acceded to the Convention on the Rights of the Child are required to submit a periodical report about the status of the implementation of the Convention in their country. Accordingly, the first India Country Report was submitted to UN in 1997. The Second Country Report was submitted on the rights of the child in 2001, which was discussed in an oral hearing in Geneva on 21 January, 2004. The UN Committee appreciated the Report and gave its comments and observations. The next Country Report is due in 2008 and the Ministry is working on it.

A National Coordinating Group has been constituted by the Ministry of Women and Child Development to monitor the implementation of the Convention on the rights of the Child (CRC) and oversee all activities directly connected to the implementation of CRC. India has signed the two Optional Protocols to the Convention on the Rights of the Child, namely, (1) on the involvement of children in armed conflicts, and (2) on the sale of children, child prostitution and child pronography in Septemeber, 2004.

7.16 National Plan of Action for Children : The National Policy for Children adopted on 22nd August 1974 lays down that the State shall provide adequate services towards children both before and after birth and during the growing stages for their full physical, mental and social development.

The National Charter for Children is a policy document adopted by the government highlighting the roles and responsibilities of the Government and the community towards the children and the duties of children towards their families, society and the country. It has been notified in the Official Gazette of India on 9 February, 2004. India was an active party in the recent movements at International Platforms like World Summit for Children 1990, UN Convention on the rights of the Child 1992, UN special session on Children May 2002. As a further step, the Ministry

has prepared a National Plan of Action for Children 2005 after harmonizing the goals for children set in the UN General Assembly Special Session on Children held in 2002 and the monitorable targets set in the Tenth Five Year Plan, and goals for children in related Ministries / Departments. The Action Plan has been prepared in consultation with concerned Ministries / Departments, States / Union Territory Governments, Non-Governmental Organisations and experts. The National Plan of Action includes goals, objectives and strategies for the current decade for improving nutritional status of children, reducing IMR and MMR, increasing enrolment ratio and reducing drop out rates, universalisation of primary education, increasing coverage for immunization, etc.

7.17 National Child Award for exceptional Achievement : The National Child Award for Excptional Achievement was instituted in 1996 to give recognition to children of 4 to 15 years age group with exceptional abilities who have achieved outstanding status in various fields including academics, arts, culture and sports, etc. One Gold Medal and 35 Silver Medals (one for each State / UT) are given annually. The awards for the year 2005 were given on 14th November, 2006.

7.18 National Award for Child Welfare : The Award was instituted in 1979 to honour five institutions and three individuals for their outstanding performance in the field of child welfare. The National Award for Child Welfare includes a cash prize of Rs. 3 lakh and a certificate for each institution and Rs. 1 lakh and a certificate for each individual. The awards for the year 2005 were given on 15th November, 2006.

7.19 Rajiv Gandhi Manav Seva Award : This Award was instituted in 1994 to hounour an individual who makes outstanding contribution towards service for children. The Awards carry a cash prize of Rs. 1.00 lakhs, a silver plaque and a citation. The number of Awards were increased to three from the year 2006. The Awards are declared on the occasion of birth anniversary of late Shri Rajiv Gandhi on 20th August every year.

8. STATUTORY AND AUTONOMOUS ORGANISATIONS

8.1 National Commission for Women : It is a statutory body constituted on 31.1.1992 under the National Commission for Women Act, 1990. The main task of the Commission is to study and monitor all matters relating to the Constitutional and legal safeguards provided for women and to review the existing legislations and suggest amendments, wherever necessary. NCW is also mandated to look into the complaints and take suo moto notice of the cases involving deprivation of the rights of women in order to provide support, legal or otherwise, to helpless and needy women. Ensuring custodial justice is another important function. The MCW is empowered to monitor the proper implementation of all the legislations made to protect the rights of women so as to enable them to achieve equality in all spheres of life and equal participation in the development of the nation.

8.2 National Commission for Protection of Child rights : The Commissions for Protection of Child Rights Act (Number 4 of 2006) and its Amendment notified in the official Gazettee of India on 20th Jan., 2006 and 29th Dec., 2006 provides for constitution of a National Commission for Protection of Child Rights as per Section 3. The Commission has started functioning from 5th March 2007. The National Commission for Protection of Child Rights has started functioning from 5th March 2007. The National Commission for Protection of Child rights is a statutory body. The objective of the Commission is proper enforcement of children's rights and effective implementation of laws and programmes relating to children. The Commission is to

look into all matters relating to children in a holistic manner. The Commission will have a Chairperson and six other Members, including two women members, and a Member Secretary. The members would be experts in the field of child health, education, child care and development, juvenile justice, children with disabilities, elimination ofchild labour, child psychology or sociology and laws relating to children.

8.3 Rashtriya Mahila Kosh (RMK) : The objective of the institution set-up on 30 March, 1993 under Societies Registration Act, 1860 is to facilitate credit support to poor women for their socio-economic upliftment. The support is extended through NGOs, Women Development Corporations, state government agencies like DRDAs, Dairy Federations, Muncipal Councils, etc. RMK extends loan to the above organisations at 8 per cent and the above organizations can lend to the women Self Help Groups / ultimate women beneficiaries at an interest ranging from 8 per cent to 18 per cent. The RMK provides micro-credit with a unique credit delivery model ''RMK-NGO-SHG - Beneficiaries'' which is one of the main reasons for its success. The other reasons are its flexible credit norms, hassle free loans, no collateral and reasonable rate of interest.

8.4 National Institute of Public Cooperationand Child Development : National Institute of Public Cooperation and Child Development (NIPCCD), new Delhi is an autonomous organisation under the aegis of the Ministry of Women and Child Development. The objectives of the Institute are to develop and promote voluntary action in social development, take a comprehensive view of women and child development, develop and promote programmes in pursuance of the National Policy for Children, develop measures for coordination of governmental and voluntary action in social development, and evolve a framework and perspective for organising children's programmes through governmental and voluntary efforts.

The Institute is the apex body for training of functionaries of the Integrated Child Development Services (ICDS) Programme. It provides technical advice and consultancy to government and voluntary agencies inpromoting and implementing policies and programmes for women and child development and voluntary action. In addition, it collaborates with regional and international agencies research institutions, universities and technical bodies. The Institute has four Regional Centres at Bangalore, Guwahati, Lucknow and Indore.

8.5 Central Social Welfare Board : Set-up in August, 1953, the growth of the Board is synonymous with the development of voluntary agencies in India. The Central Social Welfare Board has the objective of promoting social welfare activities and implementing welfare programmes for women, children and handicapped through voluntary organisations. In 1969, the Board was registered as a charitable company uner the company's act to give it legal status. There are 33 State Boards which implement the programmes such as Awarness Generation Programme, Condensed Course of Education for Women, Family Counseling Centres, Short Stay Home, Rajiv Gandhi National Creche Scheme, Hostel for Working Women (Rent) etc.

8.6 Central Adoption Resource Agency (CARA) : Central Adoption Resource Agency (CARA) was set up on 20th June, 1990. It was registered as an autonomous body under the Registration of Societies Act, 1860 on 18.3.1999. On the recommendation of State Governments, CARA gives recognition to agencies to facilitate inter-country adoptions. It also gives enlistment to foreign adoption agencies, as recognized under the appropriate laws of their own country, and recommended by Indian Missions a broad. So far, CARA has recognized 64 Indian Placement Agencies in the country

and 152 Enlisted Agencies, which also include Government Departments in more than 25 countries. CARA also implements Shishu Greh Scheme which promotes in-country adoptions.

PENSION AND PENSIONERS' WELFARE

The Department of Pension and Pensioners' Welfare set up in 1985 is the nodal agency of the Government of India for formulation of a general policy on pension and other retirement benefits, as also for redressal of grievances on retirement benefits. A number of steps have been taken in the last few years for streamlining the pension administration system. In pursuance of the recommendation of the Fifth Central Pay Commission the rates of pension, family pension, etc., have been revised as under :

(i) Minimum pension / family pension has been fixed at Rs 1,275 (subsequently raised to Rs. 1,913) by merging 50 per cent Dearness Relief of Pension with Basic Pension) per month subject to the condition that the actual amount of pension / family pension should not be less than 50 per cent and 30 per cent respectively of the minimum of revised scale of pay of the post from which the pensioner has retired; (ii) The commutation has been allowed up to 40 per cent of pension; (iii) The ceiling of gratuity has been raised to Rs 3.5 lakh; (iv) The definition of family for the purpose of family pension has been broadened to include dependent parents, dependent widowed and divorced daughters for entitlement to family pension with effect from 1 January 1998. The family pension for life has been extended to the dependent divorced and widow daughters with effect from 30 August 2004. Maximum limit for two family pensions to dependent children of the deceased Government servants has been raised to Rs. 15,000 / - with effect from the 1st January, 1996; (v) The ceiling of amount payable under the deposit linked Insurance Scheme has been enhanced from Rs 30,000 to Rs 60,000; (vi) A fixed medical allowance of Rs 100 per month has been sanctioned to all Central Government Pensioners who are residing in areas not covered by the Central Government Health Scheme; (vii) CPF retirees of the period from 18 November 1960 to 31 December 1985 who have completed 20 years of service prior to superannuation have been allowed ex-gratia at the rate of Rs 600 per month with effect from 1 November 1997; (viii) In pursuance of observations made by the Parliamentary Standing Committee of Ministry of Home Affairs in para 61 of its 44th Report, detailed instructions have been issued for timely payment of pensioners and retirement dues to the retiring employees of the Union Government. The O.M. also makes a provision for fixing responsibility for recovery of penal interest paid on delayed amount of gratuity to the retiring employees from the salary of concerned dealing official / supervisor and Head of Office in proportion; (ix) Employed family pensioners have been allowed Dearness Relief (D.R.) on their family pension with effect from 18 July 1997. In the case of re-employed pensioners D.R. on pension is payable only if pay on re-employed pensions D.R. on pension is payable only if pay on re-employment has been fixed at the minimum of the scale of re-employed post, and (x) Central Government servants who had drawn lump sum payment on absorption in PSUs / Autonomous Bodies are entitled to restoration of 1 / 3rd commuted portion of pension duly revised as per Supreme Court judgment dated 15 December 1995 and 26th April, 2000. The D.R. has now been allowed on full pension instead of 1 / 3rd commuted portion of pension. (xi) The Government have decided to issue identity cards to all civilian Central Government pensioners. (xii) From 1st January 1996 all pensioners are allowed 100 per cent neutralisation against the enhancing price rise. Orders to this effect are issued twice a year effective from 1 January and 1

July. (xii) From 1st January 1996 DA admissible on the date of retirement / death of the Government employee is treated as emoluments for the purpose of gratuity.

Besides, following are the details of other benefits / facilities relating to Pension, Family Pension etc. which have been revised / improved from time to time : (i) Based on the recommendations of the High-Level Export Group (2001) to review the pension system to introduce a comprehensive pension scheme and pursuant to the announcement in the Budget 2003-04, the Department of Economic Affairs notified on 22 December 2003, a new "Restructured Defined Contribution Pension System" for new entrants to the Central Government service, except Armed Forces, in the first stage, replacing the existing defined benefit pension system. (ii) The New Pension Scheme has become operative from 1 January 2004 and apply to Central Government servants appointed on / after 1 January 2004. (iii) Consequent to introduction of 'New Pension System' with effect from 1 January 2004, CCS (Pension) Rules 1972, CCS (Commutation of Pension) Rules 1981, GPF, CPF and EOP Rules will not be applicable to Central Government servants appointed on or after 1 January 2004; (iv) With the implementation of the 'New Pension Scheme' with effect from 1 January 2004, the old pension scheme' under the Central Civil Services (Pension) Rules, 1972, ceased to exist beyond 31 December 2003 for the Central Government servants appointed on or after 1st January, 2004. However, the employees would continue to be covered in the old pension scheme if they join after submitting technical resignation from Central Government or Central Autonomous Body where old pension scheme was in operation prior to 1 January 2004. This will facilitate mobility of employees between Central Government Departments and Central Autonomous bodies and vice versa; (v) Boy Service rendered in Armed Forces before attaining age of 18 years will now be counted for civil pension in the case of reemployed military pensioners. Necessary amendment to this effect has been made in Rules 13 and 19 of CCs (Pension) Rules, 1972; (vi) Physically or mentally disabled children of CPF / SRPF retirees are entitled to the benefit of ex-gratia payment for life on the same conditions as prescribed for such children of Governments servants under CCS (Pension) Rules 1972 and corresponding rules applicable to Railways employees; (vii) From 1 April 2004 Dearness Relief equal to 50 per cent of basic pension / family pension has been converted into Dearness Pension / Dearness Family Pension. Consequently Dearness Relief from 1 April 2004 would be payable on basic pension / family pension and on dearness pension / dearness family pension; (viii) Sub-rule (8) of Rule 37A of CCs (Pension) Rules 1972 has been amended to facilitate employees absorbed in PSU or Autonomous Body to exercise option earlier to get pro rata pensionary benefits or to continue to get combined service benefits. Prior to above amendment, employees were eligible for combined service benefits only. (ix) As part of the National e-Governance Plan (NeGP), a Web-enabled 'Pensioners' Portal has been launched w.e.f. 30.03.2007. It envisages redressal of pensioners grievances besides providing guidance and information on pension and retirement related matters. (x) SEVOTTAM (i.e. Service Delivery Excellence Model), which envisages bringing about excellence in services delivery and assessing and rating the level of excellence as per the benchmarks / norms prescribed by Department of Administrativew Reforms and Public Grievances, has been undertaken by the Department for implementation; A Citizens' Charter is under finalization under Sevottam, in consultation with stakeholders / Pensioners Associations and the Department of Administrative Reforms and Public Grivances; it outlines the Vision, Mission Activities, Clients. Policy Framework, Grievances

Redressal Mechanism, etc. of the Department. (xi) Ex-gratia ad-hoc allowance has been revised and raised from Rs. 375/- p.m. as on 1.6.1987 to Rs. 1275 p.m. w.e.f. 23.2.1998 to Burmese Civil Pensioners / family Pensioners and Pensioners families of displaced Government Pensioners from Pakistan who are Indian nationals.

RIGHT TO INFORMATION

In recognition of the need to promote transparency in public affairs and to curb corruption, the Parliament enacted the Right to Information Act in 2005. It is a path breaking legislation to empower the people specially the weaker sections of the population. While right to information is implicity guaranteed by the Constitution, the Act sets out the practical regime for citizens to secure access to information on all matters of govenance. The Act is thus a landmark initiative to make the public administration accountable and the decision-making process participatory.

This law is very comprehensive, covers almost all levels of governance and has the widest possible reach. It is applicable not only to Union, State and Local Goverbnments and the public authorities but also to the recipients of government grnats. Access to information under this Act is extensive with minimum exemptions to safeguard national interests Even the exempted organizations are subject to the citizens' right to know when the exempted organizations are subject to the citizens' right to know when the matter relates to corruption or human rights violation.

The Act is perhaps the most progressive of all such legislations in the world. The citizen does not have to establish his locus standi to seek information. It overrides anything contrary to any other Act including the 'Official Secrets Act'.

The procedure for seeking information under the Act is very simple. A person seeking information from any office of the Government has to simply make a request to the concerned Public Information Officer. The request has to merely indicate the informaton sought and the address at which the information is required. The request can be sent either by post or submitted in person. It can be made in Hindi or English or in the official language of the area and can also be sent through e-mail.

The Act permits the applicants to inspect the official documents. It also permits the applicants to collect samples of various works.

If the applicant does not get the information within 30 days or the applicant is not satisfied with the reply given to him, he can make a first appeal within 30 days to the appellate authority who is generally the officer immediately superior to the Public Information Officer. The Appellate authority has to decide the appeal within 30 days of the receipt of appeal.

If the applicant is not satisfied with the decision of the Appellate Authority, he can file a second appeal to the Central Information Commission or the State Information Commission, as the case may be within 90 days. The Central Information Commission entertains appeals in case of offices, financial institutions, public sector underakings, etc. under the Central Government and the Union Territories while the State Information Commission entertains appeals pertaining to offices, financial institutions, public sector undertakings, etc. under the concerned State Government.

Central Information Commission / State Information Commissions are high-powered independent Commissions. These Commissions have also been granted the authority to impose a penalty on the defaulting Public Information Officers.

The Act has transformed the regime of secrecy into the regime of openness. It is not that information shall be supplied only when a person requests for it. Rather, every public authority, in order to disseminate maximum possible information, is obliged to publish large quantum of information in respect of its organisation suo-motu so that the public has minimum need to resort to seek information from the public authorities.

28 Youth Affairs and Sports

YOUTH constitute nearly forty per cent of India's population. It is, therefore, necessary not only to make this vibrant and strong resource of the country beneficiaries of, but also, valuable partners in the process of our planning and development. In order that young men and women are able to contribute towards national development in a significant way, it is important that they should be able to effectively participate in the process of decision-making. Towards this end, the Ministry of Youth Affairs and Sports has in the recent past announced a National Youth Policy for the youth of the country so as to keep pace with the fast changing socio-economic scenario and also to address the emerging concerns of the youth. A National Commission for Youth has also been set up to recommend to the Government measures to tackle effectively the problems faced by the youth of India, with particular focus on unemployment. The recommendations of the commission have since been received. Two new schemes viz., Financial Assistance for the Development and Empowerment of Adolescents and Scheme for Establishment of National / State Youth Centres are proposed to be implemented during the 10th Plan. Out of these, the scheme for adolescents has been approved and is under implementation.

YOUTH SERVICES

NATIONAL YOUTH POLICY, 2003

The first National Youth Policy was formulated and laid in Parliament in 1988. A need was felt to revise the existing National Youth Policy, as a result of rapid socio-economic transformation in the country. The new National Youth Policy, 2003 formulated by the Ministry of Youth Affairs and Sports, is designed to galvanise the youth to rise up to the new challenges, keeping in view the global scenario, and aims at motivating them to be active partners in national development.

The age group of the Youth, as per the National Youth Policy, 2003, is 13 to 35 years. The New Policy recognises four thrust areas viz., (i) Youth Empowerment; (ii) Gender Justice; (iii) Inter-Sectoral Approach; and (iv) Information and Research Network. The Policy includes eight key sectors for the development of youth. The Policy also identifies five priority groups of young people.

The Policy provides implementation mechanism through which various development programmes and activities will be undertaken for the youth with active involvement of the State governments and Union Ministries and Departments.

SCOUTING AND GUIDING

Scouting and Guiding is an international educational movement aimed at developing the character of boys and girls. It inculcates in them a spirit of patriotism, sympathy for others and social service. Bharat Scouts and Guides and Hindustan Scouts and Guides mainly promote these activities in India. The Ministry of Youth Affairs and Sports extends financial assistance for the activities include adult literacy, tree plantation, community service, leprosy awareness, promotion of hygiene and sanitation, etc.

SCHEME FOR PROMOTION OF ADVENTURE

The objective of this scheme is to create and foster amongst the youth a spirit of risk-taking, co-operative teamwork, and capacity for ready and prompt response to challenging situations and of endurance. It also provides first generation learners and young people, both in urban and rural areas, with particular thrust on non-student youth in rural areas, an opportunity to inculcate a sense of adventure. The scheme also intends to create and strengthen institutional structures to support adventure programmes. The beneficiaries under this Scheme are in the age group of 13 to 35 years as mentione]d in the National Youth Policy.

NATIONAL ADVENTURE AWARDS

Under the Scheme of Promotion of Adventure, the National Adventure Awards, now renamed as Tenzing Norgay National Adventure Awards, are given as the highest national recognition of outstanding achievements in the field of adventure activities on land, sea and air. A provision has also been made for lifetime achievement has also been made in the scheme.

PROMOTION OF NATIONAL INTEGRATION

The Scheme for Promotion of National Integration aims at providing financial assistance for youth programmes fostering national integration and communal harmony. National Integration Camps, Youth Leadership Camps and Inter-State Youth Exchange Programmes are the main programmes under the scheme.

Youth Festival : Every year, beginning from 12 January which coincides with the birth anniversary of Swami Vivekananda, a 5-day long National Youth Festival is held at a chosen place in which over 2,500 youth from different States / UTs participate.

National Youth Awards : National Youth Awards are given away every year to young people (25 in number) and to one Voluntary Organisation for their excellent work in the field of social development.

NATIONAL SERVICE SCHEME

The National Service Scheme, popularly known as NSS, was launched in 1969, with its primary focus on the development of the personality of students through community service. Today, NSS has over 26 lakh student volunteers on its rolls spread over 198 universities, and 43 Senior Secondary Councils. So far, more than 2.8 crore students have benefited from NSS activities as NSS volunteers. Keeping with the commitment made under Common Minimum Programme (CMP), expansion of National Service Scheme (NSS) is planned. It is proposed to deepen and expand to NSS to include the students of Class IX & X as well. This will increase the strength of the NSS and enable the youth, and particularly the adolescents to benefit from it.

The National Service Scheme has two types of programmes, viz., ''Regular Activities'' and ''Special Camping Programme'' undertaken by its volunteers. Under **'Regular Activities'**, students are expected to work as volunteers for two years, rendering community service for a minimum of 120 hours per annum. The activities include constructive work in adopted villages and slums, blood donation, adult and non-formal education, health, nutrition, family welfare, AIDS awareness campaigns, tree plantation, improvement of campuses, etc. Under **''Special**

Camping Programme", a camp of 10 days' duration is conducted every year in the adopted areas on a specific theme.

NEHRU YUVA KENDRA SANGATHAN

The Nehru Yuva Kendra Sangathan (NYKS) is an autonomous organisation of the Ministry of Youth Affairs and Sports. NYKS has its offices in 500 districts of the country. It has become one of the largest grassroot level organisations in the world, catering to the needs of more than eight million non-student rural youth enrolled through 2.53 lakh village-based Youth Clubs. These Youth Clubs work in the areas covering education and training, awareness generation, skill development and self-employment, entrepreneurial development, thrift and co-operation, besides development of the body through sports and adventure and mind through sustained exposure to new ideas and development strategies. For implementation of the programmes, every district NYK has a network of trained cadre of District Youth Coordinators, National Service Volunteers and Youth Leaders. The strength of NYKS is its vast network of Youth Clubs at grassroots level.

NYKS accomplishes its task through two categories of programmes, i.e., 'Regular Programmes' such as Youth Club Development, Vocational Training, Work Camp, Awareness Generation, Cultural Programme, Sports Promotion, Adventure Promotion, Seminars and Workshops and Celebration of National and International Days / Weeks and 'Schemes' entrusted to it by the Ministry for implementation viz., National Service Volunteers, Financial Assistance to Youth Clubs, Awards to Outstanding Youth Clubs at District, State and National level and Youth Development Centre. The NYKS has also been implementing projects entrusted to it by various Ministries / Departments of the Government of India, besides international agencies.

NATIONAL SERVICE VOLUNTEER SCHEME

The objective of the scheme is to provide opportunities to students, generally speaking, those who have completed their graduation, to involve themselves, on a voluntary basis, in nation-building activities for a specific period on a whole-time basis. Any person who has completed his / her first degree course and is below 27 years of age may get himself / herself enrolled as a National Service Volunteer for one / two years. The requirement of age and educational qualification is relaxable in case of SC / ST and women volunteers. Each of the volunteers enrolled under the scheme is paid a stipend and necessary training is imported before deployment. Beneficiaries, apart from the NYKS, include the National Service Scheme.

RASHTRIYA SADBHAVANA YOJANA

The erstwhile National Reconstruction Crops (NRC) Scheme was now replaced by the Rashtriya Sadbhavana Yojana and the Government of India has launched the Rashtriya Sadbhavana Yojana from 1 June 2005. Under the Scheme 10 to 20 Volunteers who will be known as Nehru Yuva Sathi would be deployed to participate in programmes for youth and community development. They would be trained in issues affecting youth such as educational, employment, social and cultural to enable them to become peer educators. They would work for spreading awareness for national integration, national unity, social harmony and brotherhood. They would also make youth and community aware about social evils like gender discrimination, caste barriers, etc., and social practices and behaviours like smoking, drinking drugs, etc. Health and educational issues would also be important areas

where they can intervene to mobilise the youth. They could also be trained for catering to concerns specific to adolescents such as life skill education, counselling, career guidance, etc. They would coordinate with all registered youth clubs and ensure that all of them become active. They would also help to form Youth Development Centres. They would also act as a link between various development programmes for youth and youth organisations and to enable them to take benefit of such self-employment and employment schemes. Under the scheme Nehru Yuva Sathi will be selected from the Youth Clubs / Mahila Mandals / Sports Clubs and Youth Development Centres by a competition among them. The NYS will be deployed for one year on a monthly honorarium of Rs. 1000.

The scheme will be implemented during the remaining 10th Plan period in all the districts where Nehru Yuva Kendras are operating.

FINANCIAL ASSISTANCE TO RURAL YOUTH CLUBS / SPORTS CLUBS / EVALUATION

This scheme has the following four components:

Awards to Outstanding Youth Clubs : With a view to recognising the contribution of Youth Clubs and motivating them for more active participation in nation-building endeavour, this scheme was introduced during 1992-93. The Scheme is being implemented through the Nehru Yuva Kendra Sangathan.

The scheme operates on a three-tier level, i.e., District, State and National. At the district level, the winner receives an award of Rs 10,000 and at the State level Rs 25,000. At the National level, there are three awards of Rs one lakh, Rs 50,000 and Rs 25,000. The prize money is to be used for implementing more community based projects.

Financial Assistance to Sports Clubs to Promote Sports and Physical Fitness among the Rural Youth : With the aim to promote Nodal Voluntary Sports Clubs / Sports Centres, one in each Block, in a phased manner, the Ministry of Youth Affairs and Sports grants assistance for non-consumable sports equipment with one-time grant up to Rs 30,000 per club. In the case of tribal blocks, financial assistance up to Rs 45,000 may be given. This will be followed by a grant of Rs 5000 per annum for two subsequent years. This amount is to be supplemented by the clubs through their own resources or by voluntary contribution from the public or through State Governments. Selection of the Club is made in accordance with the criteria laid down in the scheme.

Financial Assistance to Youth Clubs : The principal objective of this scheme is to encourage and assist newly established Youth Clubs so that they can effectively take part in nation-building activities. It is also to promote organised youth club movement across the country with due recognition to the youth in their society. Under this scheme, financial assistance of Rs 10,000 per youth club in normal areas and Rs 15,000 per youth club in tribal areas is given to those Youth Clubs who are registered under the Societies Registration Act, 1860 or corresponding State Act.

Scheme of Youth Development Centres : In order to give a fillip to the participation of rural youth in development activities, a new scheme for setting up of Youth Development Centres for a group of 10 villages each was introduced during 1994-95. However, initially the centre may cover more than 10 villages. The centres are to serve as focal point for information dissemination and resource centres for the youth.

One-time financial assistance to the extent of not more than Rs 30,000 is payable to each centre to cater to the requirement of basic furniture, equipment, radio and TV / VCP. Each centre is to be managed by a youth committee drawn from the youth of the constituent villages. NYKS have set up 2551 YDCs so far in its country.

A decision has been taken to upgrade 500 Youth Development Centres as Rural Information Technology Centres during the Tenth Plan. To develop some of these centres as Rural Information Technology Youth Development Centres, a one-time grant of Rs. 120 lakh is considered on the recommendation of a committee headed by concerned District Magistrate / Deputy Commissioner. The said grant of Rs. 120 lakh will be for the purchase of following TV : Rs. 20,000, Computer-Rs. 60,000, Telephone-Rs. 10,000, Kerosene Generator : Rs. 30,000.

YOUTH DEVELOPMENT STUDIES, EVALUATION AND PUBLICATION

A number of Youth programmes are being organised in the country in the governmental and non-governmental sectors. Sponsored programmes like National Service Scheme (NSS) for the student youth, Nehru Yuva Kendra Sangathan (NYKS) for the non-student rural youth, National Cadet Corps (NCC), Scouts and Guides, Youth Hostels and Schemes like Adventure, National Integration, Youth Exhibition, Youth Exchange, Youth Awards, NSVS, etc., are in operation for quite some time. Some State and Union Territory governments have also initiated their own programmes for youth. A number of local, regional and national level autonomous youth bodies have been offering youth programmes on their own. All these need proper evaluation, study and research to test their efficiency and to develop a reliable and usable pool of knowledge, data and information. With this in view, the Scheme of Assistance for Youth Development Studies, Evaluation and Publication has been formulated.

SCHEME FOR WELFARE AND DEVELOPMENT OF ADOLESCENTS

The Government of India has, for the first time recognised the adolescents as a distinct segment of youth population with different type of problems. Recognising the distinct problems faced by this segment of the youth, the Planning Commission constituted a working group on the Welfare and Development of Adolescents which recommended that the subject of adolescents should be dealt with in the Ministry of Youth Affairs and Sports as the Nodal Ministry. The scheme has been launched by Ministry at an outlay of Rs 47 crore for the remaining Plan period. The Ministry has assisted 260 NGOs to conduct programmes for development and empowerment of adolescents under the scheme including 112 in NE areas including Sikkim.

SCHEME OF FINANCIAL ASSISTANCE FOR PROMOTION OF YOUTH ACTIVITIES AND TRAINING

The Scheme of Financial Assistance for Promotion of Youth Activities and Training has the following sub-components; (i) Vocational Training; (ii) Entrepreneurship Development; and (iii) Exhibition.

The objectives of Vocational Training Programme are to develop leadership qualities among the youth through vocational training, so that youth can act as the focal point of dissemination of knowledge in their own area of activity; to develop among the non-student rural youth such attitudes and skills as will enable them to function better as productive citizens; to prevent migration of the rural youth to cities by enabling them to realise that agriculture and other rural occupations are as

rewarding as those in the urban areas; to create new skills among rural youth through which villages can become self-reliant; to inspire youth to set-up their own training centres in their areas; and to inspire prospective young entrepreneurs to learn modern techniques / methods in training and entrepreneurship skills.

Objectives of Entrepreneurship Development Programme are to promote among the youth an understanding of the processes of entrepreneurship development; to equip the youth with the skills in designing and planning projects for enterprise development; to enable them to set-up and successfully run micro-enterprises of their own in conformity with local skills and demands for goods and services; and to help the unemployed youth with management skills.

Objectives of Exhibition Programme are to project and recognise the activities and contributions made by the youth in various fields of national development, so that youth having regard to their preferences and needs, may choose from among various options when they wish to fulfill their intellectual urges and aspirations; to promote a spirit of secularism and national integration, unity in diversity, pride in Indianness among the youth of different parts of the country and to induce a sense of communal harmony; to enable the youth to receive education and knowledge about Indian culture, freedom struggle, the Constitution of India, Five-Year Plans, Panchayati Raj, the schemes for weaker sections, protection of environment, population stabilisation and the latest developments taking place in the field of art, culture, education, agriculture, industry, science and technology; and to provide an outlet to the youth to display their skills and creativity in various fields.

Eligibility : Under the Scheme, State government / Union Territory Administrations; Recognised Educational Institutions and Polytechnics including Universities; Regional Centres of National Service Scheme and Colleges having National Service Scheme units; Nehru Yuva Kendras; Bharat Scouts and Guides; Panchayati Raj Institutions, and non-governmental voluntary organisations (NGOs), public trusts and non-profit making societies registered under the Societies Registration Act, 1860 or any corresponding State Act who have completed at least three years on the date of application will be eligible to apply for financial assistance.

RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT

The Rajiv Gandhi National Institute of Youth Development (RGNIYD) set up at Sriperumbudur (Tamil Nadu) functions as an autonomous body for coordinating and monitoring youth-related activities in the country. The Institute is to function as: (i) a research agency and think-tank for youth programmes, policies and implementation strategies; (ii) develop multifaceted programmes for youth; (iii) function as an institute for advanced studies in the field of youth; (iv) function as a centre for documentation, information and publication pertaining to youth development; and (v) work as a Resource Centre.

The Institute was functioning with the skeleton staff and one division but is in the process of being expanded with the creation of 4 more Divisions with supporting staff. Thus, the Institute will now have the following 5 Division : (a) Training, Orientation and Extension Division, (b) Research, Evaluation and Documentation / Dissemination Division, (c) Panchayati Raj and Youth Affairs Division, (d) International Centre for Excellence in Youth Development Division, (e) Social Harmony and National Unity Division. At present 72 Youth Hostels are functioning in the country.

YOUTH HOSTELS

Youth Hostels are built to promote youth travel to enable the young people experience the rich cultural heritage of the country. The construction of Youth Hostels has been conceived as a joint venture of the Central and State governments. While the Central government bears the cost of construction, the State government provides developed land free-of-cost with water, electricity and approach roads. Youth Hostels, after completion, are handed over to the State government for management.

SPORTS

NEW NATIONAL SPORTS POLICY

The National Sports Policy was initially formulated in 1984. In order to broad-base sports and to promote excellence, Government has formulated a New National Sports Policy, 2001. The salient features of the New National Sports Policy are as under : 1. Broad-basing of Sports and achievement of excellence; 2. Upgradation and development of infrastructure; 3. Support to the National Sports Federations and other appropriate bodies; 4. Strengthening of scientific and coaching support to sports; 5. Incentives to sports persons; 6. Enhanced participation of women, Scheduled Tribes and rural youth; 7. Involvement of the Corporate Sector in sports promotion; and 8. Promote sports mindedness among the public at large.

SPORTS AUTHORITY OF INDIA

The Sports Authority of India (SAI) was established by the Government of India in January 1984 as a registered society primarily to ensure effective maintenance and optimum utilisation of the various sports infrastructure that were built in Delhi during Asiad, 1982. It is now the nodal agency in the country for broad-basing sports and for training of sportspersons to achieve excellence in national and international sports, the Society for National Institute of Physical Education and Sports (SNIPES) was merged with SAI with effect from 1 May 1987. Subsequently Netaji Subhash National Institute of Sports (NSNIS), Patiala and its allied centres at Bangalore, Kolkata and Gandhinagar and Lakshmibai National Colleges of Physical Education at Thiruvananthapuram came under Sports Authority of India (SAI). It has now six regional centres at Bangalore, Gandhinagar, Kolkata, Chandigarh, Bhopal and Imphal. Sports infrastructure is being created at Sonepat and the Northern Regional Centre would be shifted from Chandigarh to Sonepat. SAI has one Centre which is at Guwahati.

SAI also operates a High Altitude Training Centre (HATC) at Shillaroo (H.P.). SAI proposes to open more sub-centres in addition to its Regional Centres. These are : (1) Sub-centre at Jabalpur (MP), Lucknow (UP), Nagercoil (Tamil Nadu) and Hazaribagh (Jharkhand).

SAI operates various schemes at sub-junior, junior and senior level, namely, National Sports Talent Contest (NSTC), Army Boys Sports Company (ABSC), SAI Training Centres (STC) and Special Area Games (SAG) to achieve excellence at national and international level. SAI has also set-up Centres of Excellence (COE) for elite sports persons at each of its Regional Centres and one at National Institute of Sports, Patiala and Sports College, Lucknow. There are 22 NSTC adopted Schools including 33 Akharas, 49 Navodaya Vidyalayas and 27 Schools for promotion of Indigenous Games and Martial Arts. Equipment support has also been provided to 34 Akharas. There are 10 ABSC, 19 SAG Centres including 2 Associated Centres, 57

STCs and 16 Centres of Excellence. Navodaya Vidyalayas have been adopted to give impetus to sports in rural and semi-urban areas and to have balanced approach. This mammoth effort involves widespread talent scouting including from rural, coastal and tribal areas and training of selected individuals by providing all vital inputs. The National Coaching Scheme of SAI provides coaches for training of sportspersons to the State / UT Sports Councils at their State and District Coaching Centres, SAI Schemes, National Coaching Camps and for conducting Academic Courses in Sports Coaching at NIS, Patiala. The Lakshmibai National College of Physical Education (LNCPE) is the apex Institute for conducting research and offering academic courses in Physical Education. In addition, SAI also implements a number of Central Government Schemes to encourage sportspersons by providing them scholarships. SAI also implements sports schemes for women and the North-East besides promoting rural sports.

LAKSHMIBAI NATIONAL INSTITUTE OF PHYSICAL EDUCATION

The Lakshmibai National Institute of Physical Education was established initially as a College on 17 August 1957, the centenary year of the first war of India's Independence. The Institute is located at Gwalior, where Rani Lakshmibai of Jhansi had laid down her life for the country's freedom struggle. In recognition of the service rendered by the Institute in the field of physical education and sports, it has been upgraded to a 'Deemed University' status in 1995. The Institute is fully-funded by the Government of India.

The Institute offers the following full-time courses: (1) Bachelor of Physical Education (BPE) (3 years degree course); (2) Master of Physical Education (MPE) (2 years course); (3) MPE (Summer Course) (3 year course) for in-service teachers; and (4) M. Phil in Physical Education (1 year course).

The Institute also conducts in-service training programmes in physical education for ex-army personnel, refresher / orientation course for physical education teachers in universities, colleges and schools. The Institute attracts students from abroad also.

COMMONWEALTH Games, 2010 : Commonwealth Games, 2010 are going to be hosted in Delhi from 3 October to 14 October 2010.

A comprehensive integrated approach is being worked out for creation and development of World Class Sports Infrastructure, Games Village, Civic Infrastructure, Tourism, Transportation and Security related aspects.

The Institutional mechanism approved by the Government mainly comprises of a Group of Ministers, Apex Body, Organising Committee and other Committees for Coordination, implementation, supervision and monitoring.

A special Action Plan would be evolved to prepare Indian sportspersons for increasing the medal tally of India in Commonwealth Games, 2010.

SCHEME RELATING TO AWARDS

The scheme has the following three components under which awards are given to outstanding sportspersons for winning medals in international sports events.

Rajiv Gandhi Khel Ratna Award : The scheme was launched in the year 1991-92 for honouring the outstanding sportsperson in a year for his / her achievement in sports. The award is given in the form of a cash award of Rs 5 lakh, scroll of honour and a plaque.

Special Awards to Winners in International Sports Events and their Coaches : This scheme was introduced in the year 1986 to encourage and motivate outstanding sportspersons for even higher achievement and to attract the younger generation to take sports as a career. The scheme has recently been reviewed and revised. From the year 2004, special awards at the following revised rates will be given to sportspersons and their coaches for winning laurels in different competitions.

Name of Championship / Game	Gold Medal First Position	Silver Medal Second Position	Bronze Medal Third Position
For Winning Olympics Games	Rs. 30 lakhs	Rs. 18 lakhs	Rs. 12 lakhs
Official World Cups / Asian Games / Commonwealth Games	Rs. 10 lakhs	Rs. 5 lakhs	Rs. 3 lakhs
Asian and Commonwealth Championships	Rs. 3 lakhs	Rs. 2 lakhs	Rs. 1.5 lakhs

MAULANA ABUL KALAM AZAD (MAKA) TROPHY

Inter-University tournaments are an integral and important part of games and sports in universities and colleges. The top overall performing university in the Inter-University Tournaments is given the Maulana Abul Kalam Azad (MAKA) Trophy, which is a rolling trophy. The University also awards a small replica of the MAKA Trophy for retention. In addition, the university also gets a cash prize of Rs 2 lakh. The second and third best universities also receive cash awards amounting to Rs one lakh and Rs 50,000 respectively.

SCHEME RELATING TO INCENTIVES FOR PROMOTION OF SPORTS ACTIVITIES

The scheme has the following five sub-components:

Sports Fund for Pension to Meritorious Sportspersons : This scheme was launched in the year 1994 under this scheme pension is given to a meritorious sportsperson after he / she attain the age of 30 years for his / her lifetime. The scheme is being operated through Life Insurance Corporation of India. The scheme has recently been revised by enhancing the rates of pensions. Besides, new categories of pension have also been added to the scheme. Pensions will now be given at the following rates :

(a)	Medallists at the Olympic Games	Rs. 5,000 / - p.m.
(b)	Gold medallists at the World Cups / World Championships in Olympic and Asian Games disciplines	Rs. 4,000 / - p.m.
(c)	Silver and Bronze medallists of the World Cups / World Championships in Olympic and Asian Games disciplines	Rs. 3,500 / - p.m.
(d)	Gold medallists of the Asian / Commonwealth Games	Rs. 3,500 / - p.m.
(e)	Silver and Bronze medallists of Asian / Commonwealth Games	Rs. 3,000 / - p.m.

(f)	Gold medallists of Para-Olympic Games	Rs. 3,000/- p.m.
(g)	Silver medallists of Para-Olympic Games	Rs. 2,500/- p.m.
(h)	Bronze medallists of Para-Olympic Games	Rs. 1,500/- p.m.

The pension is given from the age of 30 for lifetime. The scheme is being operated through the Life Insurance Corporation of India (LIC).

Promotion of Sports and Games in Schools : The Scheme was introduced in 1986 with a view to raising the standard of sports at the school level and to encourage participation in inter-school competitions. Under this scheme, financial grant was given @ Rs 50,000 per district and Rs two lakh per state to the Directorates of Sports of State/UT governments for holding district and State level inner-school tournaments. The State performing the best at the national level tournaments was given an award of Rs one lakh along with a rolling trophy. The scheme was operated directly through the State/UT Governments. The scheme has recently been revised enhancing the rates of grants-in-aid to Rs 75,000 per district and Rs three lakh per State for organising inter-school sports tournaments. At the national level, the Sports Authority of India will be given assistance @ Rs two lakh per discipline for conduct of national level tournaments. The revised scheme will now be implemented through the Sports Authority of India.

Rural Sports Programme : Rural Sports Programme was launched in 1970-71 with a view to broad-basing games and sports and tapping the hidden talent in rural areas. The scheme has two sub-components, viz., organisation of rural sports tournaments and organisation of a Sports Festival for the North Eastern Region. The scheme has recently been revised enhancing the grants-in-aid under various components/items of the scheme. The rural stock scheme provides for financial assistance @ Rs 30,000 per discipline at the district level.

Sports Scholarship Scheme : Sports Scholarship Scheme was launched in the year 1970-71 with a view to assisting talented boys and girls for their outstanding performances. The Scheme aims at assisting sports persons so that they can have nutritious diet, sports equipment support and be able to pursue sports as a career.

The scheme has recently been revised with the following enhancement in the rates of scholarships: (i) State level Championship (Category - I), @ Rs 550 per month, i.e., Rs 6,600 per annum (12 months); (ii) National level Scholarship (Category - II) @ Rs 700 per month, i.e., Rs 8,400 per annum (12 months); (iii) University/College level Scholarship (Category - III) @ Rs 850 per month, i.e., Rs 10,200 per annum (12 months); (iv) Scholarship for senior women champions, @ Rs 1,500 per month, i.e., Rs 18,000 per annum; (v) Scholarship for women doing diploma @ Rs 7,500 per course; and (vi) Scholarship for women doing M.Phil/Ph.D. @ Rs 10,000 per annum.

NATIONAL WELFARE FUND FOR SPORTSPERSONS

The National Welfare Fund for sports persons was set up in March 1982 primarily to assist outstanding sportspersons of yesteryears, living in indigent circumstances. This financial support is given in the form of pension up to Rs 2,500 per month. Lump-sum grants up to Rs 40,000 are also given for medical treatment. Sportspersons who suffer from grievous and fatal injury in the course of participation in sports events during training are also helped.

NATIONAL SPORTS CHAMPIONSHIP FOR WOMEN

The scheme started in 1975, aims at promoting sports amongst women. Under the

scheme, national level competitions are preceded by holding of lower level competitions (Block, District and State level) for which States / UTs are provided financial assistance as per norms. The scheme is implemented through the Sports Authority of India.

DHYAN CHAND AWARD FOR LIFETIME ACHIEVEMENTS IN SPORTS AND GAMES

Dhyan Chand Award for lifetime achievements in sports and games instituted in the year 2002 is given to honour those sportspersons who have contributed to sports by their performance and continue to contribute to promotion of sports even after their retirement from active sporting career. The award carries a cash of Rs three lakh, a plaque and a scroll of honour. Three awards are given every year.

SCHEME RELATING TO TALENT SEARCH AND TRAINING

Under the Scheme, selected sportspersons who have equalled or excelled the existing national record or are Gold medallists of last National Championship or are medallists of Asian / Commonwealth / Afro-Asian Games / Olympic Games / World Championship in the relevant category disciplines are provided a package of assistance up to Rs five lakh per year for coaching, equipment, participation in national and international tournaments, etc., on a long-term basis. The coaches, sports scientists and other sportspersons are also assisted for up-gradation of their skills and assisting the promising sports persons for achieving excellence at international level.

GRANTS TO NATIONAL SPORTS FEDERATIONS

This Ministry gives financial assistance to 64 recognised National Sports Federations for conducting National Sports Championships at Sub-Junior, Junior and Senior level @ Rs six lakh, Rs four lakh and Rs two lakh respectively. Financial assistance is also given to NSFs of priority and general category Sports disciplines for participation in International Sports Tournaments / Championships, holding of International tournaments in India, procuring sports equipment, coaching / training under national foreign coaches, etc.

NATIONAL SPORTS DEVELOPMENT FUND

A National Sports Development Fund has been set-up to mobilise financial resources from Government, corporate and private sector as well as individuals for promotion of Sports. The Ministry has made initial contribution of Rs two crore as seed money during 1998-99. Further Government contribution is on matching basis to the contribution received from other sources. Large number of elite sportspersons have been assisted under the fund.

ARJUNA AWARDS

The Arjuna Award was instituted in 1961. The Government has recently revised the Scheme of Arjuna Awards for outstanding performance in sports and games. According to this, to be eligible for the Award, a sportsperson should have had not only good performance consistently for the previous three years at the international level with excellence for the year for which the Award is recommended but also should have shown qualities of leadership, sportsmanship and a sense of discipline. The Awardee is given a statuette, a scroll of honour, ceremonial dress and a cash award of Rs three lakh.

From the year 2001, the award is being given in the following disciplines : (1) Olympic Games / Asian Games / Commonwealth Games / World Cup / World Championship disciplines and cricket; (2) Indigenous Games; (3) Sports for Physically challenged.

DRONACHARYA AWARD

The Dronacharya Award, instituted in 1985, honours eminent Coaches who have successfully trained sportspersons or teams and enabled them to achieve outstanding results in international competitions. The awardee is given a statuette of Guru Dronacharya, a scroll of honour, ceremonial dress and a cash prize of Rs three lakhs.

INTERNATIONAL COOPERATION

Commonwealth Youth Programme (CYP) : The Commonwealth Youth Programme (CYP) came into being in 1974 with the purpose of promoting the development of young men and women in the Commonwealth countries. Its main objectives are to encourage and support participation of youth in the process of national development; to give recognition to the contribution made by youth in economic, social and cultural development; to promote productive activity in order to eliminate unemployment and to provide opportunities for international understanding among youth. The headquarters of CYP is at the Commonwealth Secretariat, London and one of its four Regional Centres is in Chandigarh for the Asia Region. The Member countries finance the programmes.

Exchange of Delegations of Youth at International Level : The international exchange of youth delegation has been conceived as an effective instrument for promoting exchange of ideas amongst the youth of different countries and to develop better relations with other countries. Under this programme, youth delegations are exchanged with foreign countries for participation in various youth programmes, meeting, seminars, conferences, etc.

United Nations Volunteer Programme : The United Nations Volunteer Programme was created by the United Nations General Assembly in 1970 with the objective of providing developing countries with an additional source of qualified and trained manpower at low cost and opportunity to young professionals from all nations to take part in development activities world-wide. There are numerous fields of activity in which UNDP taps talent from developing and industrialised countries for assignment of UNVs in the fields of agriculture, health, civil aviation, rural water supply, meteorology, road construction, communications, etc.

The Ministry of Youth Affairs and Sports is the national focal point for the UNV scheme. Assignments are made according to the requirements of various developing countries. Besides specific demands for which special efforts are made, as aspiring volunteer can apply through this Ministry for an assignment anytime during the year through a prescribed proforma for his / her name being placed on the roster of UNDP. No formal pay and allowances are given to the UNVs but, instead, they are paid a Monthly Living Allowance ranging from $ 635 to $ 2200 depending on the marital status of the applicant, local conditions of the host country, number of dependents (up to two), etc.

29 States and Union Territories



ANDHRA PRADESH

Area	:	2,75,069 sq km	Population	:	7,62,10,007
Capital	:	Hyderabad	Principal Languages	:	Telugu and Urdu

HISTORY AND GEOGRAPHY

The earliest mention of the Andhras is said to be in Aitereya Brahmana (2000 BC). It indicates that the Andhras, originally an Aryan race living in north India migrated to south of the Vindhyas and later mixed with non-Aryans. Regular history of Andhra Desa, according to historians, begins with 236 BC, the year of Ashoka's death. During the following centuries, Satavahanas, Sakas, Ikshvakus, Eastern Chalukyas, Kakatiyas ruled the Telugu country. Other dynasties that ruled over the area in succession were the kingdoms of Vijayanagar and Qutub Shahi followed by Mir Qumruddin and his successors, known as the Nizams. Gradually, from the 17th century onwards, the British annexed territories of the Nizam and constituted the single province of Madras. After Independence, Telugu-speaking areas were separated from the composite Madras Presidency and a new Andhra State came into being on 1 October 1953. With the passing of the States Reorganisation Act, 1956, there was a merger of Hyderabad State and Andhra State, and consequently Andhra Pradesh came into being on 1 November 1956.

Andhra Pradesh is bound on the north by Orissa and Chhattisgarh, on the west by Maharashtra and Karnataka, on the south by Tamil Nadu and on the east by the Bay of Bengal with a coastline of 974 km.

AGRICULTURE

Agriculture is the main occupation of about 62 per cent of the people in Andhra Pradesh. Rice is a major food crop and staple food of the State contributing about 77 per cent of the foodgrain production. Other important crops are jowar, bajra, maize, ragi, small millets, pulses, castor, tobacco, cotton and sugarcane. Forests cover 23 per cent of the State's area. Important forest products are teak, eucalyptus, cashew, casurina, bamboo, softwood, etc.

IRRIGATION

Important irrigation schemes implemented in the State are Vamsadhara Project Stage-I, Godavari Delta System, Yeleru Reservoir Project, Krishna Delta System, Pennar Delta System, Pennar River Canal System, Neelam Sanjeeva Reddy Sagar

Project, Tungabhadra Project high level canal Stage-I, Tungabhadra Project low level canal, Sriramsagar Stage-I, Nizamsagar Project, Nagarjuna Sagar Project and Rajolibanda Diversion scheme.

Andhra Pradesh is the first state to involve the farmers in the management of irrigation sources.

POWER

Important power projects in the State are : the Nagarjunasagar and Neelam Sanjiva Reddy Sagar (Srisailam Hydel Project), Upper Sileru, Lower Sileru, Tungabhadra Hydel Projects and Nellore, Ramagundam, Kothagudem, Vijayawada and Muddanur thermal power projects. The Srisailam Hydro Electric Project (Right Bank) with an installed capacity of 770 MW and the Srisailam Left Bank HES Capacity of 900 MW and the Nagarjunasagar Complex with 960 MW are the principal sources of hydel generation. Vijayawada Thermal Power Station with an installed capacity of 1,260 MW and Kothagudem Thermal Power Station with an installed capacity of 1,200 MW are the main sources of thermal power generation. The 1,000 MW coal-based Simhadri Thermal Power Station aims at supplying the entire energy generated to the State. Installed capacity of the state as on May"07 is 11668.5 M.W. For massive capacity addition of 7513 MW, 14 new projects are programmed by AP GENCO during XI Plan (2012).

INDUSTRY AND MINERALS

There are several major industries in operation around Hyderabad and Visakhapatnam. They manufacture machine tools, synthetic drugs, pharmaceuticals, heavy electrical machinery, fertilizers, electronic equipments, aeronautical parts, cement and cement products, chemicals, asbestos, glass and watches. Andhra Pradesh has the largest deposits of quality chrysolite asbestos in the country. Other important minerals found in the state are copper ore, manganese, mica, coal and limestone. The Singareni Coal Mines supply coal to the entire South India.

TECHNOLOGY

The State government is also promoting Indian Institute of Information Technology (IIIT) at Hyderabad. IIIT offers 4-year UG and 2/3 year PG programmes. IBM, Oracle, Signal Tree, Satyam and Motorola have established their corporate schools.

TRANSPORT

Roads : National Highways passing through Andhra Pradesh constitute 4,647 km. There are 62,110 km of state roads including 9212 km of State highways and 1,24,143 km of Panchayati Raj roads in the State as on March 2007.

Railways : Of the railways route covering 5,107 km in Andhra Pradesh, 4,633 km is broad-gauge, 637 km is metre-gauge and 37 km is narrow gauge.

Aviation : Important airports in the State are located at Hyderabad, Tirupathi and Visakhapatnam. International flights are operated from Hyderabad.

Ports : Visakhaptnam is a major port in the State. Minor ports are located at Kakinada, Machilipatnam, Bheemunipatnam, Krishnapatnam, Vadarevu and Kalingapatnam.

TOURIST CENTRES

Charminar, Salarjung Museum, Golconda Fort in Hyderabad, Thousand Pillar

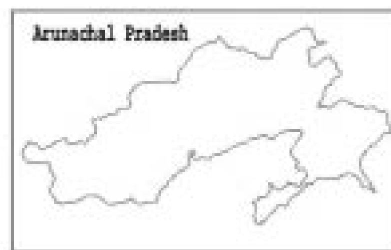
Temple and Fort in Warangal, Sri Lakshmi Narasimha Swamy Temple at Yadagirigutta, Buddha Stupa at Nagarjunakonda and Nagarjuna Sagar, Sri Venkateswara Temple at Tirumala-Tirupathi, Sri Mallikarjunaswamy Temple at Srisailam, Kanaka Durga Temple at Vijayawada, Sri Satyanarayana Swamy Temple at Annavaram, Sri Varaha Narasimha Swamy Temple at Simhachalam, Sri Sita Rama Temple at Bhadrachalam, Araku Valley, Horsley Hills, Nelapattu, etc., are the major tourist attractions in Andhra Pradesh. Thirty-three life-size statues of eminent Telugu personalities of the State were erected on Tankbund of Hussainsagar lake in Hyderabad. A giant statue of Lord Buddha of a height of about 60 feet has been erected on the Gibraltar Rock in the Hussainsagar lake which separates Hyderabad and Secunderabad cities.

GOVERNMENT

Governor	: Narayan Dutt Tiwari	Secretary Chief Justice	: K. Tuljanand Singh : G.S. Sanghvi
Chief Minister	: Y. S. Rajasekhar Reddy	Jurisdiction of High Court	: Andhra Pradesh
Speaker	: K.R. Suresh Reddy		

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area in 000' sq km	2001 Census Population	Headquarters
1.	Adilabad	16.1	24,88,003	Adilabad
2.	Ananthapur	19.1	36,40,478	Ananthapur
3.	Chittoor	15.2	37,45,875	Chittoor
4.	Cuddapah	15.4	26,01,797	Cuddapah
5.	East Godavari	10.8	49,01,420	Kakinada
6.	Guntur	11.4	44,65,144	Guntur
7.	Hyderabad	0.2	38,29,753	Hyderabad
8.	Karimnagar	11.8	34,91,822	Karimnagar
9.	Khammam	16.0	25,78,927	Khammam
10.	Krishna	8.7	41,87,841	Machilipatnam
11.	Kurnool	17.7	35,29,494	Kurnool
12.	Mahaboobnagar	18.4	35,13,934	Mahaboobnagar
13.	Medak	9.7	26,70,097	Sangareddy
14.	Nalgonda	14.2	32,47,982	Nalgonda
15.	Nellore	13.1	26,68,564	Nellore
16.	Prakasam	17.6	30,59,423	Ongole
17.	Nizamabad	8.0	23,45,685	Nizamabad
18.	Ranga Reddy	7.5	35,75,064	Hyderabad
19.	Srikakulam	5.8	25,37,593	Srikakulam
20.	Visakhapatnam	11.2	38,32,336	Visakhapatnam
21.	Vizianagaram	6.5	22,49,254	Vizianagaram
22.	Warangal	12.9	32,46,004	Warangal
23.	West Godavari	7.7	38,03,517	Eluru



ARUNACHAL PRADESH

Area	:	83,743 sq km	Population	:	10,97,968 (census 2001 Prov.)
Capital	:	Itanagar	Principal Languages	:	Monpa, Miji, Aka, Sherdukpen, Nyishi, Apatani, Tagin, Hill Miri, Adi, Digaru-Mismi, Idu-Mishmi, Khamti, Miju-Mishmi, Nocte, Tangsa and Wancho.

HISTORY AND GEOGRAPHY

Arunachal Pradesh, the erstwhile North-East Frontier Agency shares international boundaries with Bhutan, Tibet, China and Myanmar to the west, north-east, north and east respectively, and the state boundaries with Assam and Nagaland. The terrain consists of submontane and mountainous ranges, sloping down to the plains of Assam, divided into valleys by the rivers Kameng, Subansiri, Siang, Lohit and Tirap.

There are practically no records relating to the history of this area, except some oral literature and a number of historical ruins found mainly in the foothills. Subsequent explorations and excavations have identified the ruins as dating approximately from the early Christian era. The historical evidence indicates that not only was the area well known, but the people living here had close relations with the rest of the country.

Modern history of Arunachal Pradesh, begins with the inception of British rule in Assam after the treaty of Yandaboo concluded on 24 February 1826. Before 1962 the area was popularly known as the North East Frontier Agency (NEFA), and was constitutionally a part of Assam. Because of its strategic importance, however, it was administered by the Ministry of External Affairs until 1965 and subsequently by the Ministry of Home Affairs, through the Governor of Assam. In 1972 it was constituted as a Union Territory and renamed Arunachal Pradesh. On 20 February 1987, it became the 24th state of the Indian Union.

AGRICULTURE AND HORTICULTURE

Agriculture is the mainstay of the people of Arunachal Pradesh and mainly depends on jhum cultivation. Encouragement is being given to the cultivation of cash crops like potatoes and horticulture crops like apples, oranges and pineapples.

INDUSTRIES AND MINERALS

For conservation and exploration of the vast minerals the Arunachal Pradesh Mineral Development and Trading Corporation Limited (APMDTCL) was set up in 1991. Namchik-Namphuk coal fields are taken up by APMDTCL To provide training to craftsmen in different trades there are two Industrial Training Institutes at Roing and Daporijo.

FESTIVALS

Some of the important festivals of the State are: Mopin and Solung of the Adis, Lossar of the Monpas and Boori-boot of the Hill Miris, Sherdukpens, Dree of the Apatanis, Si-Donyi of the Tagins, Reh of the ldu-Mishmis, Nyokum of the Nishis, etc. Animal sacrifice is a common ritual in most festivals.

TOURIST CENTRES

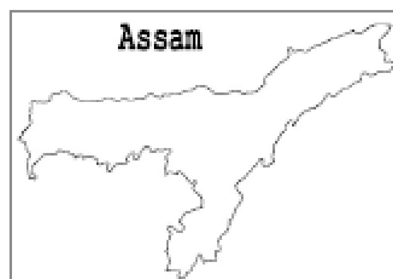
Places of tourist interest are : Tawang, Dirang, Bomdila, Tipi, Itanagar Malinithan, Likabali, Pasighat, Along, Tezu, Miao, Roing, Daporijo Namdapha, Bhismaknagar, Parashuram Kund and Khonsa.

GOVERNMENT

Governor	:	K. Sankaranarayanan	Secretary	:	C.P. Mansai
Chief Minister	:	Dorjee Khandu	Jurisdiction of High Court	:	Falls under Guwahati High Court
Speaker	:	Setong Sena			

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S .No.	District	Area (sq km)	Population	Headquarters
1.	Tawang	2,172	38,924	Tawang
2.	West Kameng	7,422	74,599	Bomdila
3.	East Kameng	4,134	57,179	Seppa
4.	Papum-Pare	2,875	1,22,003	Yupia
5.	Lower Subansiri and Kurung Kumey	10,135	98,244	Ziro
6.	Upper Subansiri	7,032	55,346	Daporijo
7.	West Siang	8,325	1,03,918	Along
8.	East Siang	4,005	89,397	Pasighat
9.	Upper Siang	6,188	33,363	Yingkiong
10.	Dibang and Lower Dibang Valley	13,029	57,720	Anini
11.	Lohit and Anjaw	11,402	1,43,527	Tezu
12.	Changlang	4,662	1,25,422	Changlang
13.	Tirap	2,362	1,00,326	Khonsa



ASSAM

Area	: 78,438 sq km	Population	: 2,66,55,528
Capital	: Dispur	Principal Language	: Assamese

HISTORY AND GEOGRAPHY

The word 'Assam' as interpreted by some scholars is derived from the Sanskrit word Asoma meaning peerless or unparalleled. But the widely accepted opinion of the academic circles today is that the term has come from the original name of the Ahoms, who ruled the land for about six hundred years prior to its annexation by the British. The races like Austric, Mongolian, Dravidian and Aryan that came to this land long-long ago have contributed to its composite culture. Thus Assam has a rich legacy of culture and civilization.

Assam was known as Pragjyotisha or the place of eastern astronomy during the epic period and later named as Kamrupa. The earliest epigraphic reference to the kingdom of Kamrupa is found in the Allahabad pillar inscription of king Samudragupta. Kamrupa is mentioned as a Pratyanta or frontier state outside the Gupta empire but with friendly and subordinate relation to it. Hiuen Sang, the Chinese scholar pilgrim who visited Kamrupa in about 743 AD on an invitation of its monarch, Kumar Bhaskar Varman, left a record of the kingdom he called Kamolupa. Kamrupa also figured in the writings of the Arabian historian Alberuni in the eleventh century. Thus, from the epic period down to the twelfth century AD, the eastern frontier kingdom was known as Pragjyotisha and Kamrupa and kings called themselves 'Lords of Pragjyotisha'.

The advent of the Ahoms across the eastern hills in 1228 AD was the turning-point in Assam history. They ruled Assam nearly for six centuries. The Burmese entered through the eastern borders and overran the territory at a time when court intrigues and dissensions were sapping the vitality of the Ahom royalty. It became a British protectorate in 1826 when the Burmese ceded Assam to the British under the provision of the Treaty of Yandabo.

Assam is the sentinel of north-east India and gateway to the North-Eastern States. The State is close to India's international borders with Bangladesh and Bhutan. Assam is surrounded by Bhutan and Arunachal Pradesh on the north, Manipur, Nagaland and Arunachal Pradesh on the east and Meghalaya, Tripura and Mizoram on the south.

AGRICULTURE

Assam is an agricultural State. Agriculture occupies an important place in the economy of the State. The principal food crop is rice. The cash crops are jute, tea, cotton, oilseeds, sugarcane, potato, etc. Noteworthy horticulture items are orange,

banana, pineapple, arecanut, coconut, guava, mango, jackfruit and citrus fruits. The State has an estimated 39.83 lakh hectares gross cropped area of which net area sown is about 27.24 lakh hectares.

FORESTS

Assam is known for her rich forest wealth which constitutes 26.22 per cent of the total forest area.

WILD LIFE

The State has five National Parks and eleven wildlife sanctuaries. The Kaziranga National Park and the Manas Tiger Project (National Park) are internationally famous for the one horned Rhino and Royal Bengal Tiger respectively.

INDUSTRY

Of agriculture-based industries, tea occupies an important place. There are six industrial growth centres in the State and two such centres are being set up at Balipara and Matia. Presently four oil refineries have been working in the State including the one at Digboi. Construction of the Export Promotion Industrial Park (EPIP) at Amingaon near Guwahati is nearing completion. A Software Technology Park will be constructed at Borjhar near Guwahati. A Central Institute for Plastic Engineering Technology (CIPET) has been established at Amingaon near Guwahati. Assam has always enjoyed the highest reputation for her arts and crafts associated with her cottage industries. Cottage industries include handloom, sericulture, cane and bamboo articles, carpentry, brass and bell-metal crafts. Assam produces varieties of silk, Endi, Muga, Tassar, etc., Muga silk is produced only in Assam in the world.

POWER

The major power stations are Chandrapur Thermal Project, Namrup Thermal Project and a few Mobile Gas Turbine Units along with a mini hydro-electric project. Revitalising the Thermal Power Station of Bongaigaon and on-going the Karbi-Langpi Project will boost the power supply in the State. The Lakuwa Waste Heat Recovery Project is expected to be commissioned in 2008-09.

TRANSPORT

Roads : The total length of roads in the State was 37,515 km which includes 2,754 kms of National Highways. The construction of 160 km of barbed wire fencing and 27 kms of the border road along the Indo-Bangladesh International have been completed.

Railways : The length of railway tract in Assam is 2,284.28 kms comprising 1,227.16 kms under broad-gauge and 1,057.12 km under meter-gauge lines.

Aviation : The regular civil air services operate from Lokopriya Gopinath Bordoloi Airport (Guwahati), Salonibari (Tezpur), Mohanbari (Dibrugarh), Kumbhirgram (Silchar), Rawriah (Jorhat) and Silonibari (North Lakhimpur).

FESTIVALS

Assam has an exclusive range of colourful festivals. Bihu is the chief festival celebrated on three occasions. Rongali Bihu or Bohag Bihu marks the advent of the cropping season and it also ushers in the Assamese New Year. Bhogali Bihu or Magh Bihu is the harvest festival and Kati Bihu or Kongali Bihu coming in autumn is a simple affair.

Religion accounts for a large variety of festivals. Vaishnavites observe the birth and death anniversaries of prominent Vaishnava saints through day-long singing of hymns and staging of Bhaonas (theatrical performances in traditional style). Ambubachi in Kamakhya shrine, Sivaratri Mela at Umananda and other places near Siva temples, Durga Puja, Diwali, Dol-Jatra, Id, Christmas, Ashokastami Mela, Rash Mela, Parasuram Mela are other religious festivals.

TOURISM

Important places of tourism in and around Guwahati are Kamakhya temple, Umananda (Peacock Island), Navagraha (temple of nine planets), Basistha Ashram, Dolgobinda, Gandhi Mandap, State Zoo, State Museum, Sukreswar temple, Gita Mandir, Madan Kamdev temple, a magnificent archaeological place of interest, and Saraighat bridge.

Other places of tourist interest in the State are : Kaziranga National Park (famous for the one horned rhino), Manas Tiger Project, Pobi-tora and Orang (wildlife sanctuaries), Sibsagar (Shiv Temple-Rangghar-Karengghar), Tezpur (Bhairavi temple and scenic beauty), Bhalukpung (Angling), Haflong (health resort with Jatinga hills), Majuli (largest river island in the world), Chandubi lake (picnic spot), Hajo (meeting point of Buddhism, Hinduism and Islam), Batadrava (birth place of great Vaishnava saint Sankaradeva) and Sualkuchi (famous for silk industry).

GOVERNMENT

Governor	: Lt. Gen. (Retd.) Ajai Singh	Secretary	: Gauranga Prasad Das
Chief Minister	: Tarun Gogoi	Jurisdiction of Guwahati High Court	: All North-Eastern States
Speaker	: Tanka Bahadur Rai		

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population (in lakh)[1]	District Headquarters
1.	Dhubri	2,838	16.35	Dhubri
2.	Kokrajhar	3,129	9.30	Kokrajhar
3.	Bongaigaon	2,510	9.06	Bongaigaon
4.	Goalpara	1,824	8.22	Goalpara
5.	Barpeta	3,245	16.42	Barpeta
6.	Nalbari	2,257	11.38	Nalbari
7.	Kamrup	4,345	25.15	Guwahati
8.	Darrang	3,481	15.04	Mangaldoi
9.	Sonitpur	5,324	16.78	Tezpur
10.	Lakhimpur	2,277	8.89	North Lakhimpur
11.	Dhemaji	3,217	5.89	Dhemaji
12.	Morigaon	1,704	7.76	Morigaon

13.	Nagaon	3,831	23.15	Nagaon
14.	Golaghat	3,502	9.46	Golaghat
15.	Jorhat	2,851	10.09	Jorhat
16.	Sibsagar	2,668	10.53	Sibsagar
17.	Dibrugarh	3,381	11.72	Dibrugarh
18.	Tinsukia	3,790	11.50	Tinsukia
19.	Karbi-Anglong	10,434	8.12	Diphu
20.	North Cachar Hills	4,888	1.86	Haflong
21.	Karimganj	1,809	10.04	Karimganj
22.	Hailakandi	1,327	5.43	Hailakandi
23.	Cachar	3,786	14.42	Silchar

[1] Provisional



BIHAR

Area	: 94,163 sq km	Population	: 8,28,78,796
Capital	: Patna	Principal Language	: Hindi

HISTORY AND GEOGRAPHY

Bihar finds mention in the Vedas, Puranas, epics, etc., and was the main scene of activities of Buddha, and the 24 Jain Tirthankars. Great rulers of the State before the Christian era were Bimbisar, Udayin, who founded the city of Pataliputra. Chandragupta Maurya and Emperor Ashoka and Maurya dynasty, the Sungs and the Kanvas. Then came the Kushan rulers followed by Chandragupta Vikramaditya of the Gupta dynasty. Muslim rulers made in-roads into the territory during the medieval period. The first conqueror of Bihar was Mohammed- bin-Bakhtiar Khalji. The Tughluqs and then the Mughals followed the Khaljis.

One of the major states of the Indian Union, Bihar is bounded on the north by Nepal, on the east by West Bengal, on the west by Uttar Pradesh and on the south by Jharkhand. Bihar has a number of rivers, the most important of which is the Ganga. The other rivers are the Sone, Poonpoon, Falgu, Karmanasa, Durgawati, Kosi, Gandak, Ghaghara, etc.

AGRICULTURE

Bihar has a total geographical area of about 93.60 lakh hectare, out of which only 56.03 lakh hectare is the net cultivated area with a gross cultivated area of 79.46 lakh hectares. About 33.51 lakh hectares net area and 43.86 lakh hectare gross area receive irrigation from different sources. Principal food crops are paddy, wheat,

maize and pulses. Main cash crops are sugarcane, potato, tobacco, oilseeds, onion, chillies, jute and mesta. Bihar has a notified forest area of 6,764.14 sq km, which is 7.1 per cent of its geographical area.

INDUSTRIES

Major Industries are : Railway Wagon Plants of Bharat Wagon Limited at Muzaffarpur and Mokamah; Oil Refinery of Indian Oil Corporation at Barauni; Fertilizer Manufacturing Plant of Hindustan Fertilizer Corporation Limited (HPCL) at Barauni and Pyrites Phosphates & Chemicals Limited (PPCL) at Amjhor; Cotton Spinning Mills at Siwan, Pandaul, Bhagalpur, Mokamah and Gaya; 13 sugar mills in the private sector and 15 in the public sector located in south and north Bihar with a total crushing capacity of 45,000 TPD. In addition, distilleries at Gopalganj, West Champaran, Bhagalpur and Riga (in Sitamarhi district); finished leather industry in West Champaran, Muzaffarpur and Barauni; jute mills at Katihar and Samastipur; medicine manufacturing unit at Hajipur; food processing units as also vanaspati manufacturing units at Aurangabad and Patna; besides Kalyanpur Cement Limited at Banjari, are notable on the industrial map of Bihar.

IRRIGATION

Bihar has an irrigation potential of 102.50 lakh hectares. Out of this, 53.53 lakh hectares is to be created through major and medium irrigation schemes and 48.97 lakh hectares through minor irrigation schemes.

TRANSPORT

Roads : Up to March 2001, Bihar had 13,412.80 km of pucca roads including 2,461.73 km of national highways and 10,951.07 kms of state highways and major district roads.

Railways : Bihar has a fairly good railway network. Communication in north Bihar is difficult as there is only one railway bridge at Mokamah. A few railway routes connecting important places like Muzaffarpur-Samastipur-Barauni-Katihar and Muzaffarpur-Chapra-Siwan have been converted into broad gauge. The main rail junctions are at Patna, Gaya, Muzaffarpur, Katihar and Samastipur, etc.

Aviation : There is an international airport at Patna, besides landing grounds in all major districts of the State.

TOURIST CENTRES

Important places of tourist interest are Rajgir, Nalanda, Vaishali, Pawapuri (where Lord Mahavira breathed his last and attained Nirvana), Bodh Gaya, Vikramshila (ruins of Buddhist University of higher learning), Gaya, Patna (ancient city of Patliputra), Sasaram (tomb of Shershah Suri) and Madhubani (known for its famous Madhubani Paintings).

GOVERNMENT

Governor	:	R.S. Gavai	Secretary	:	Surendra Prasad Sharma
Chief Minister	:	Nitish Kumar	Jurisdiction of High Court	:	Bihar

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (in sq km)	Population	Headquarters
1.	Araria	2,796.8	21,24,831	Araria
2.	Aurangabad	3,389.2	20,04,960	Aurangabad
3.	Begusarai	1,889.1	23,42,989	Begusarai
4.	Bhagalpur	2,501.9	24,30,331	Bhagalpur
5.	Banka	3,020.2	16,08,778	Banka
6.	Bhojpur	2,337.0	22,33,415	Arrah
7.	Buxar	1,633.6	14,03,462	Buxar
8.	Kaimur (Bhabhua)	1,840.3	12,84,575	Bhabhua
9.	Darbhanga	2,502.0	32,85,473	Darbhanga
10.	East Champaran	4,154.8	39,33,636	Motihari
11.	Gaya	4,941.0	34,64,983	Gaya
12.	Gopalganj	2,009.2	21,49,343	Gopalganj
13.	Jahanabad	1,569.3	15,11,406	Jahanabad
14.	Jamui	2,996.5	13,97,474	Jamui
15.	Saharsa	1,195.6	15,06,418	Saharsa
16.	Katihar	3,009.9	23,89,533	Katihar
17.	Khagaria	1,485.8	12,76,677	Khagaria
18.	Kishanganj	1,938.5	12,94,063	Kishanganj
19.	Madhepura	1,797.4	15,24,596	Madhepura
20.	Madhubani	3,477.8	35,70,651	Madhubani
21.	Munger	-	11,35,499	Munger
22.	Lakhisarai	3,302.2	8,01,173	Lakhisarai
23.	Sheikhpura	-	5,25,137	Sheikhpura
24.	Muzaffarpur	3,122.7	37,43,836	Muzaffarpur
25.	Nalanda	2,361.7	23,68,327	Biharsharif
26.	Nawada	2,497.5	18,09,425	Nawada
27.	Patna	3,130.1	47,09,851	Patna
28.	Purnea	3,202.3	25,40,778	Purnea
29.	Rohtas	3,838.2	24,48,762	Sasaram
30.	Samastipur	2,578.7	34,13,413	Samastipur
31.	Saran	2,624.1	32,51,474	Chapra
32.	Sitamarhi	2,627.7	26,69,887	Sitamarhi
33.	Sheohar	-	5,14,288	Sheohar
34.	Siwan	2,213	27,08,840	Siwan
35.	Supaul	2,984.9	17,45,069	Supaul
36.	Vaishali	1,995.3	27,12,389	Hazipur
37.	West Champaran	4,249.9	30,43,044	Bettiah



CHHATTISGARH

Area	: 1,36,034 sq km	Population :	2,07,95,956 (Census 2001)
Capital	: Raipur	Principal Language	: Hindi

HISTORY AND GEOGRAPHY

Chhattisgarh, carved out of Madhya Pradesh came into being on 1 November 2000 as the 26th State of the Union. It fulfills the long-cherished demand of the people. In ancient times the region was known as Dakshin-Kausal. This finds mention in Ramayana and Mahabharata also. Between the sixth and twelfth centuries Sarabhpurias, Panduavanshi, Somvanshi, Kalchuri and Nagvanshi rulers dominated this region. Kalchuris ruled in Chhattisgarh from 980 to 1791 AD. With the advent of the British in 1845, Raipur gained prominence instead of capital Ratanpur. In 1904 Sambalpur was transferred to Orissa and estates of Sarguja were transferred from Bengal to Chhattisgarh.

Chhattisgarh is bounded by southern Jharkhand and Orissa in the east, Madhya Pradesh and Maharashtra in the west, Uttar Pradesh and western Jharkhand in the north and Andhra Pradesh in the south. Areawise Chhattisgarh is the ninth largest state and population-wise it is seventeenth state of the nation.

AGRICULTURE

Agriculture and allied activities account for nearly 80 per cent of the work force in the state. Out of the geographical area 13,790 thousand hectares, gross cropped area is about 35 per cent of the total geographical area. Kharif is the main cropping season. Rice is the predominant crop of the state, other important crops are maize, wheat, niger, groundnut and pulses. The state has one of the biggest collection of rice germplasm. Horticulture crops are grown in an area of about 303.57 thousand hectares.

IRRIGATION AND POWER

When the state came into being, the total irrigation capacity was 13.28 lakh hectares which has now increased to 16.81 Lakh hectares. Major completed projects are Tandula, Kodar and Pairy.

The total capacity of the State Electricity Board is 1,681.05 MW, out of this the thermal power share is 1,260 MW and the rest is hydel power. The electricity board is investing in modernisation, strengthening transmission and distribution networks and creating more generating capacities. The Board itself is adding 500 MW installed generating capacity area 2 X 250 MW unit in Korba. The private sector has been encouraged to setup generating capacities and to make third party sales outside the state. Around 93 per cent of 19,720 inhabited villages of Chhattisgarh have been electrified.

MINERAL RESOURCES

Chhattisgarh hosts a wide variety of minerals found in igneous, sedimentary and metamorphic terrains. Large deposits of coal, iron ore, limestone, bauxite, dolomite and tin ore are located in several parts of the state. Lately diamonditerous kimberlites identified in Raipur district are likely to yield substantial quantity of diamonds. There are also present medium to small deposits of gold and base metals. Satite furn corrundum, graphite of workable size are likely to graduate to the category of large deposits after prospecting. Twenty per cent of the country's steel and cement is produced in the state. It is the only tin ore producing state in the country. The mineral resources have immense potential for large investments in mining, setting of mineral based industries and generating employment. Chhatttisgarh nestles atop the world's largest kimberlite area. Eight blocks have been demarcated for diamond exploration.

Apart from diamond, four blocks of gold exploration and five blocks for base metal investigations have also been demarcated.

INDUSTRY

Chhattisgarh is generously bestowed with natural resources like forests, minerals and surface water. The State has undergone a radical change and is thriving with industrial activities now. Chhattisgarh produces 15 per cent of the steel made in the country. Many Government of India Undertakings like Bhilai Steel Plant, National Mineral Development Corporation, South-Eastern Coal Field Limited, NTPC and a number of large cement plants by groups like ACC, Gujarat Ambuja, Grasim, CCI and La-farge of France and 53 steel projects (sponge iron / pig iron route) in private sector are also under different stages of implementation. There are approximately 133 steel re-rolling mills and a number of mini steel plants. The state also boasts of 11 ferro-alloy units, steel / cast iron casting units, engineering and fabrication units apart from large number of agro-based and food processing, chemical, plastic, construction material, forest produce based units.

Due to its conducive industrial environment, Chhattisgarh is now fetching huge amount of industrial investment. Approximately 80 MOUs worth Rs. 85,000 cores were signed for establishing new industries and expansion of existing units. Chhattisgarh stood first in Industrial Entrepreneurship Memorandum (IEM) report released by Ministry of Industries, Government of India with the proposed investment of Rs. 1,07,899 crores during the period Jan-Dec 2006.

Strategically located in central India, Chhattisgarh is able to supply power to units for all the time. About 17 per cent of the countries coal reserves in the state, offering cheap pithead power generation opportunities with the potential to produce up to 50,000 MW of power. NTPC is now installing a new power generation unit, the largest ever, by it in Bilaspur district. NTPC has started construction on its 2,640 MW Super Thermal plant in Sipat and another 600 MW plant in Korba. Several other states are also interested in installing plants here. Private sector MoUs for more than 25,000 MW and more projects are in the pipeline. Chhattisgarh State Industrial Development Corp. Ltd., Raipur has developed, maintained and is managing approximately an area of 3,500 hectares of industrial land. More than 925 industries with investments of more than Rs. 18,000 million providing direct employment to 80,000 persons have already been setup on the land developed by this corporation.

INFORMATION TECHNOLOGY

E-Governance in Chhattisgarh is oriented towards ensuring people, access to government, this makes the government even more responsive and transparent. Chips (Chhattisgarh Infotech and Biotech Promotion Society) was setup with a high powered governing council under the Chief Minister's chairpersonship, to act as a prime mover for IT and Biotechnology in the state. All citizen services of e-governance are under one umbrella project called CHOICE (Chhattisgarh On-line Information for Citizens Empowerment).

Chhattisgarh got the United Nations Development Programme (UNDP) Award 2007 for its Human Development Report, using Information technology for the betterment of citizens.

TRANSPORT

ROADS: The total length of the roads in the State in 34,930 kms. The length of the national highways is 2,225 kms, state highways 3,213.50 kms, district roads 4,814 kms and rural roads is 27,001 kms.

Two north-south and four east-west road corridors are being constructed in the state for better connectivity having a total length of 3106.75 kms.

RAILWAYS : Raipur, Bilaspur, Durg, Rajnandgaon, Raigarh and Korba are important railway stations.

TOURIST CENTRES

Chhattisgarh situated in the heart of India, is endowed with a rich cultural heritage and attractive natural diversity. The State is full of ancient monuments, rare wildlife species, carved temples, Buddhist sites, palaces, water-falls, caves, rock paintings and hill plateaus. Bastar, with its unique cultural and ecological identity, Chitrakote Falls, a spot where the river Indravati has an abrupt fall of 96 ft, Tirathgarh Falls, the picturesque waterfall of Kanger river from a height of 100 ft in the form of steps. Keshkal valley, Kangerghati National Park, Kailash caves, Sita Bongara and Kutumbsar caves are rich in natural beauty. In Bilaspur, Mahamaya temple at Ratanpur, Bambleshwari Devi Temple at Dongargarh, Danteshwari Devi Temple at Dantewada, Sirpur an important centre of Buddhism from 6-10th century, Champaran the birth place of Mahaprabhu Vallabhacharya, Khutaghat waterfall, Dindneswari Devi temple of Malhar and the Achanakmar sanctuary, Udanti sanctuary near Raipur, Pali and Kendai waterfall of Korba district are important places of tourist interest. The Sabari temple of Kharod Janjgir-Champa Nar Narayan temple of Sheorinarayan, Vishnu Temple of Janjgir are important religious places. The state has set up a State Tourism Promoting Board as the nodal agency for the sustained development of interrelated sectors in tourism.

GOVERNMENT

Governor	:	Shri E.S.L. Narasimhan	Chief Secretary	:	Shri Shivraj Singh
Chief Minister	:	Dr. Raman Singh	Jurisdiction of High Court	:	Chhattisgarh
Speaker	:	Prem Prakash Pandey			

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (in sq km)	Population	Headquarters
1	Bastar	10,376	11,31,453	Jagdalpur
2	Bilaspur	8,569	19,93,042	Bilaspur
3	Durg	8,702	28,01,757	Durg
4	Raigarh	6,528	12,65,084	Raigarh
5	Raipur	13,445	30,09,042	Raipur
6	Rajnandgaon	8,023	12,81,811	Rajnandgaon
7	Sarguja	16,034	19,70,661	Ambikapur
8	Koria	5,978	5,85,455	Baikunthpur
9	Jashpur	6,457	7,39,780	Jashpur
10	Janjgir-Champa	4,467	13,16,140	Janjgir
11	Korba	5,769	10,12,121	Korba
12	Kanker	6,434	6,51,333	Kanker
13	Dantewada	9,055	4,89,233	Dantewada
14	Mahasamund	4,963	8,60,176	Mahasamund
15	Dhamatari	4,081	7,03,569	Dhamtari
16	Kabirdham	3,958	5,84,667	Kawardha
17	Narayanpur	6,640	1,10,800	Narayanpur
18	Bijapur	6,555	2,29,832	Bijapur



GOA

Area	: 3,702 sq km	Population	: 13,47,668 (2001 Census)
Capital	: Panaji	Principal Languages	: Konkani and Marathi

HISTORY AND GEOGRAPHY

Goa, known in the bygone days as Gomanchala, Gopakapattam, Gopakapuri, Govapuri, Gomantak, etc., abounds in a rich historical heritage. Early history of Goa is obscure. In the first century of the Christian era, Goa was a part of the Satavahana empire, followed by the Kadamba, the Rashtrakutas of Malkhed, the Chalukyas and the Silharas. The empire of the Yadavas by the end of the 14th century was displaced by the Khiljis of Delhi and thus Muslim rule came to Goa. After the discovery of the sea route to India by Vasco-da-Gama in 1498, many Portuguese expeditions came to India. In 1510, Alfonso de Albuquerque with the help of the

emperor of Vijayanagar attacked and captured Goa. With the arrival of the Jesuit priest Francis Xavier in 1542 proselytisation began in Goa. However, the Portuguese continued to rule over the territory except for an interlude during the latter half of the 17th century when Shivaji conquered a few areas in and around Goa. Even after India's independence, Goa continued to be in the hands of the Portuguese. However, they could not fulfil the aspirations of the Goan people and ultimately on 19 December 1961, Goa was liberated and made a composite union territory with Daman and Diu. On 30 May 1987 Goa was conferred statehood and Daman and Diu was made a separate union territory.

Goa is situated on the western coast of the Indian Peninsula. On its north runs the Terekhol river which separates Goa from Maharashtra and on the south lies North Canara district of Karnataka. On the east lie the Western Ghats and in the west the Arabian Sea. Panaji, Margao, Vasco, Mapusa and Ponda are the main towns of Goa.

AGRICULTURE

Rice is the main food crop. Pulses, ragi and other food crops are also grown. Main cash crops are coconut, cashewnut, arecanut, sugarcane and fruits like pineapple, mango and banana. The State has a rich forest cover of more than 1,424 sq km.

IRRIGATION AND POWER

With the commissioning of dams like Selaulim and Anjunem and other minor irrigation projects, the area under irrigation is rising steadily. The total irrigation potential created by these projects is 43,000 hectares. All villages have been electrified leading to cent per cent coverage.

INDUSTRY AND MINERALS

The State has 7110 small-scale industrial units and 20 industrial estates. Mineral products are ferro-manganese, bauxite and iron ore contributing substantially to the economy of the State through exports.

TRANSPORT

Roads : Of the motorable roads, national highway constitutes 224 kms, state highways 232 kms and district roads 815 kms.

Railways : Goa is linked with Mumbai, Mangalore and Thiruvananthapuram through the Konkan Railway, which has introduced several fast trains on these lines. Vasco da Gama is connected with Bangalore and Belgaum on the South Central Railway, pesently for goods traffic only.

Aviation : Mumbai, Delhi, Thiruvananthapuram, Cochin, Chennai, Agati and Bangalore are linked with Dabolim through regular Airlines services.

Ports : Mormugao is the major port in the State. Mormugao handles cargo vessels. Minor ports are located at Panaji, Tiracol, Chapora Betul and Talpona, out of which Panaji is the main operative port. One off-shore berth at Panaji has also been commissioned.

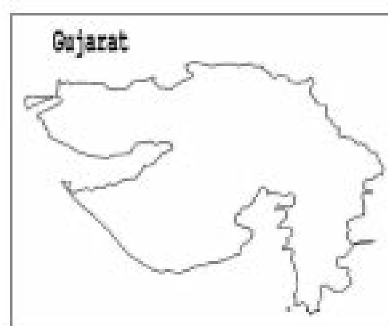
TOURIST CENTRES

Important tourist centres are Colva, Calangute, Vagator, Baga, Harmal, Anjuna and Miramar beaches; Basilica of Bom Jesus and Se Cathedral churches at Old Goa; Kavlem, Mardol, Mangeshi, Bandora temples; Aguada, Terekhol, Chapora and Cabo

de Rama Forts; Dudhsagar and Harvalem waterfalls and Mayem lake resort. The state has rich wildlife sanctuaries, viz., Bondla, Cotigao, Molem and Dr Salim Ali Bird Sanctuary at Chorao covering an area of 354 sq km.

GOVERNMENT

Governor	:	S. C. Jameer	Chief Secretary	:	J.P. Singh
Chief Minister	:	Sh. Digamber Kamat	Jurisdiction of High Court	:	Falls under Panaji Bench of Mumbai High Court
Speaker	:	Sh. Pratap Singh R. Rane			



GUJARAT

Area	:	1,96,024 sq km	Population	:	5,06,71,017
Capital	:	Gandhinagar	Principal Language	:	Gujarati

HISTORY AND GEOGRAPHY

The history of Gujarat goes back to 2000 BC. It is belived that Lord Krishna left Mathura to settle on the west coast of Saurashtra which later came to be known as Dwarka, the gateway. Later it saw various kingdoms : Mauryas, Guptas, Pratiharas and others. It was during the rule of Chalukyas (Solankis) that Gujarat witnessed progress and prosperity. In spite of the plunderings of Mahmud Ghazani, the Chalukyan kings were able to maintain general prosperity and well-being of the State. After this glorious respite, Gujarat faced troubled times under the Muslims, Marathas and the British rule. Before Independence, the present territories of Gujarat used to be in two parts the British and the Princely territories. With the re-organisation of the States, the Union of the States of Saurshtra and the Union Teritory of Kachchh along with the former British Gujarat, became a part of the biggest bilingual State of Bombay. The present State of Gujarat came in to being on 1 May 1960. It is situated on the west coast of India. The state is bounded by the Arabian Sea on the west, Pakistan and Rajasthan in the north and north-east respectively, Madhya Pradesh in the south–east and Maharashtra in the south.

AGRICULTURE

Gujarat is the main producer of cotton, groundnut and tobacco in the country and provides inputs for important industries like textiles, oil and soap. Other important cash crops are isabgol, paddy, wheat and bajra. Forest species available in Gujarat are sadad, haldariyo and manual bamboos.

INDUSTRY

The industrial structure in the State has been gradually diversifying with the development of industries like chemicals, petrochemicals, fertilizers, engineering, electronics, etc. The number of registered working factories in the State were 22,155 (Provisional) at the end of 2005 with the average daily employment to 9.78 lakh. The number of Small-Scale industrial units in the State was 3.12 lakh at the end of March 2006. Gujarat Industrial Development Corporation (GIDC) has been assigned the role of developing industrial estates with infrastructure facilities. At the end of December 2006 GIDC had set up 237 industrial estates.

IRRIGATION AND POWER

The total irrigation potential through surface water as well as ground water has been assessed at 64.88 lakh hectars including 17.92 lakh hectares through Sardar Sarovar (Narmada) Project. The total irrigation potential created up to June 2006 is worked out to 41.78 lakh hectares. The maximum utilisation has been estimated at 37.20 lakh hectares up to June 2006.

The total installed capacity for the state including central sector project has increased to 8974 MW as on 31 March 2006. As per new difinition of villages, 17,823 villages are feasible for electrification against the total number of 18066 inhabited villages in the State.

TRANSPORT

Roads : The total length of roads (except Non-plan, Community, Urban and Project roads) was 74,018 km by the end of 2003-04. The length of surfaced roads was 70,921 km at the end of 2003-04.

Aviation : The main airport of Gujarat at Ahmedabad is connected with Mumbai, Delhi and other cities by daily services. Ahmedabad airport has now got the status of an International Airport. Other airports are Vadodara, Bhavnagar, Bhuj, Jamnagar and Rajkot.

Ports : Gujarat has 40 ports of which Kandla is a major port. The intermediate and minor ports of Gujarat handled a total cargo of 1041.46 lakh tonnes whereas Kandla port handled cargo of 459.07 lakh tonnes during 2005-06.

FESTIVALS

Tarnetar fair is held at village Tarnetar in the honour of Lord Shiva on the 4^{th}, 5^{th}, and 6^{th} days of the bright half of of the month of Bhadrapada (August / September). Madhavrai fair at Madhavpur near Porbandar is, held to celebrate the marriage by elopement of Lord Krishna and Rukmani, on the ninth day of the bright half of the month of Chaitra (March / April) Ambaji fair dedicated to Amba-mother goddess is held in Banaskantha district. The biggest annual fair, Janmashtami the birthday of Lord Krishna is celebrated at Dwarka and Dakor with grate enthusiasm. Other festivals are Makar-Sankranti, Navratri, Dangi Darbar, Shamlaji fair, Bhavnath fair.

TOURIST CENTRES

Religious spots like Dwarka, Somnath, Palitana, Pavagadh, Ambaji, Bhadreshwar, Shamlaji, Taranga and Girnar, Porbandar the birthplace of Mahatma Gandhi Place of memorable monuments of artchitectural and archological surprises like Patan, Siddhpur, Ghurnli, Dabhoi, Vadnagar, Modhera, Lothal and Ahmedabad; Beaches like Ahmadpur–Mandvi, Chorvad, Ubharat, and Thital; the Hill station Saptura ;

Lion sanctuary of Gir forest and wild ass sanctuary in Katchchh area are major tourist attractions in the State.

GOVERNMENT

Governor	: Navalkishore Sharma	Chief Secretary	: Sudhir Mankad
Chief Minister	: Narendra Modi	Jurisdiction of High Court	: Gujarat State
Speaker	: Mangalbhai Patel		

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

District	Area (sq km)	Population (2001 Census)	Headquarters
Ahmedabad	8,087	58,16,519	Ahmedabad
Amreli	7,397	13,93,918	Amreli
Anand	2,941	18,56,872	Anand
Banaskantha	10,757	25,04,244	Palanpur
Bharuch	6,527	13,70,656	Bharuch
Bhavnagar	9,981	24,69,630	Bhavnagar
Dohod	3,646	16,36,433	Dohod
The Dangs	1,764	1,86,729	Ahwa
Gandhinagar	2,163	13,34,455	Gandhinagar
Jamnagar	14,125	19,04,278	Jamnagar
Junagadh	8,846	24,48,173	Junagadh
Kheda	4,219	20,24,216	Nadiad
Kachchh	45,652	15,83,225	Bhuj
Mahesana	4,384	18,37,892	Mahesana
Narmada	2,755	5,14,404	Rajpipla
Navsari	2,209	12,29,463	Navsari
Panchmahal	5,220	20,25,277	Godhara
Patan	5,730	11,82,709	Patan
Porbandar	2,298	5,36,835	Porbandar
Rajkot	11,203	31,69,881	Rajkot
Sabarkantha	7,390	20,82,531	Himatnagar
Surat	7,657	49,95,174	Surat
Surendranagar	10,489	15,15,148	Surendranagar
Vadodara	7,549	36,41,802	Vadodara
Valsad	3,035	14,10,553	Valsad



HARYANA

Area	:	44,212 sq km	Population	:	2,11,44,564
Capital	:	Chandigarh	Principal Language	:	Hindi

HISTORY AND GEOGRAPHY

Haryana has a proud history going back to the Vedic Age. The state was the home of the legendary Bharata dynasty, which has given the name Bharat to India. Haryana finds mention in the great epic of Mahabharata. Kurukshetra, the scene of the epic battle between the Kauravas and the Pandavas, is situated in Haryana. The state continued to play a leading part in the history of India till the advent of the Muslims and the rise of Delhi as the imperial capital of India. Thereafter, Haryana functioned as an adjunct to Delhi and practically remained anonymous till the First War of India's Independence in 1857. When the rebellion was crushed and the British administration was re-established, the Nawabs of Jhajjar and Bahadurgarh, Raja of Ballabgarh and Rao Tula Ram of Rewari of the Haryana region were deprived of their territories. Their territories were either merged with the British territories or handed over to the rulers of Patiala, Nabha and Jind. Haryana thus became a part of the Punjab province. With the reorganisation of Punjab on 1 November 1966, Haryana was made into a full-fledged state.

The state is bound by Uttar Pradesh in the east, Punjab in the west, Himachal Pradesh in the north and Rajasthan in the south. The National Capital Territory of Delhi juts into Haryana.

AGRICULTURE

Agriculture is the mainstay of more than 65 per cent population in Haryana with contribution of 26.4 per cent in GDP of the State. The quantum of foodgrains production, which was nearly 25.92 lakh tonnes at the time of inception of the state if likely to touch 147.52 lakh tonnes in 2006-07 due to crop intensification and increase in production of principal crops. Rice, wheat, jowar, bajra, maize, barley and pulses, sugarcane, cotton, oilseeds and potato are the major crops of the state. Under the diversification of crops, more and more area is being brought under cash crops like sugarcane, cotton and oilseeds, vegetable and fruits. Cultivation of new crops like castor, soyabean, groundnuts and horticulture crops are also being encouraged. Sustainable agriculture is being promoted through the propagation of resource conserving technologies and organic farming.

INFORMATION TECHNOLOGY

In view of the importance of Information Technology in the globalisation process throughout the world, the State Government has formulated an IT Policy which

provides several incentives for IT and ITES/BPO Industry. Government has also recently announced a policy for Technology Parks, which gives considerable flexibility for setting up Technology Parks and IT Corridors. The objective of this policy is also to promote convergence of Information Technology with frontier technologies like Nano Technology, Bio Technology, Mobile Computing and Robotics, etc. Further, Gurgaon has been developed as a preferred investment destination for both IT and ITES/BPO companies. Now, Gurgaon has become the home of the corporate world in India. The State Government is planning to set up Hi-Tech Habitat Centre in the Electronic City, Gurgaon for IT/ITES/BPO companies, which would provide world-class facilities. Besides Gurgaon, the state also intends to develop other areas in NCR region, especially those alongside the Kundli-Manesar-Palwal Express Highway and Faridabad, as satellites of Gurgaon-Manesar Mega IT Hub. The software exports from Haryana during 2004-05 were Rs. 7,300 crore and during the last year, it has increased by 34 per cent as compared to the previous year.

The State of Haryana is an aspiring leader in E-Governance as per the E-Governance readiness index of the country. Haryana not only aspires to attain leadership position but also is going ahead with e-Governance initiatives by establishing State Wide Area Network (SWAN). The SWAN is being set up connecting the State Headquarters and District Headquarters and all Block HQs to respective District HQs. SWAN also envisages village connectivity through wireless. This shall enable transparency, efficiency and accountable governance that shall throw up opportunities and provide access to the citizens-centeric services. E-Disha, a single point multi-service delivery system for providing citizen-centric services has been launched in 5 districts and is being launched in other districts of the State. The Local Area Networks (LAN) have been established at major buildings and a number of departments at State and District level. The Haryana State Data Centre has been established with the assistance of NIC with 1000 GB storage capacity.

Under the Computer Training Programme, more than 15000 government Employees have been trained.

INDUSTRY

Haryana has a large industrial base having more than 1,271 large and medium and 80,000 Small Scale Units in the State. Name any item, it is produced in Haryana. Haryana is the largest producer of passenger cars, tractors, motorcycles, bicycles, refrigerators, scientific instruments, etc. Haryana is the largest exporter of Basmati rice to the overseas market. Panipat handlooms and carpets are known all over the world besides, the famous Pachranga Achaar.

Since July 1991, 3439 Industrial Entrepreneur Memorandum (IEMs) were filed and out of these 1916 IEMs were implemented with Capital Investment of Rs 16,030 crore and generating employment for 3,21,959 persons. As a result of the new Industrial Policy, State has received about 30 proposals for setting up of SEZs in the State which has envisaging an investment of Rs. 1.5 lakh crore in the industrial infrastructure. These projects on implementation would create several thousand crores investment in the industrial sector besides, generating huge employment. State is developing industrial model township at Faridabad, Rohtak and Jagadhari besides expansion of IMT Manesar in Gurgaon. Petrochemical Hub is coming up with investment of Rs. 30,000 crore at Panipat. Kundli-Manesar-Palwal Expressway is being developed with investment of Rs. 2000 crore. This will create a large number of economic hubs all along the expressway generating new investment opportunities in the industrial and service sector. The State is also fully exploring the potential of

economic development by developing new industrial estates at Bahadurgarh, Rohtak as well as to expand industrial infrastructure in Sonipat, Kundli, Rai and Barhi. Many proposals for setting up new industrial estates at different locations particularly in Ambala, Saha, Yamuna Nagar, Barwala, Karnal, Rohtak and Kaithal are under consideration with the State Government.

There is a great demand from industries for allotment of industrial land in the industrial estates developed by the HSIDC and HUDA. During this period of the present Government, 75 new industrial units in the large and medium sectors and 1354 new small-scale industrial units with investment of Rs. 2400 crore have been set up generating direct employment for more than 11,000 persons. Besides, a large number of industrial units have undergone expansion and as a result of it fresh investment of more than Rs. 25,000 crore has been created. Recently, Indian Oil Corporation has set up Paraxylene / PTA project at Panipat with an investment of about Rs. 4000 crore. Maruti Udyog Hero Honda and many other automobile ancillaries are undergoing expansion programme with investment of about Rs. 10,000 crore. At present, investment proposals of about Rs. 55,000 crore are under implementation in the Industrial Sector. Similarly, new investment in IT and Textile sector particularly the readymade garment is coming up in the State.

IRRIGATION

Haryana is a beneficiary of the multi-purpose project in Sutlej and Beas sharing benefits with Punjab and Rajasthan. Major irrigation projects are western Yamuna Canal, Bhakra Canal and Gurgaon Canal System. Haryana has raised water from lower levels to higher and drier slopes. It is a new endeavour that gave practical shape to lift irrigation for the first time in India.

The Jui, Siwani, Loharu and Jawahar Lal Nehru lift irrigation schemes have helped to carry irrigation water against gravity flow to arid areas. Sprinkler and drip irrigation have been introduced in the highly undulating and sandy tracks of Haryana.

Construction work of Hathni Kund barrage at a cost of Rs 220 crore has been completed. Haryana and Uttar Pradesh would get additional water for irrigation purposes from the barrage and Delhi would get additional water for drinking.

POWER

Haryana became the first State in the country to achieve 100 per cent rural electrification in 1970. Starting with 20,000 tubewells in 1966 there were 4.28 lakh tubewells in March 2007. The average power availability during 2006-07 was 664.61 lakh units a day. The number of consumers in 2005-06 were 40 lakh. The installed generation capacity as on 31 March 2007 was 4051.30 MW.

TRANSPORT

Roads : In Haryana all villages stand connected with metalled roads. The length of roads in the State is more than 31,901 km.

Railways : Ambala, Panipat and Jakhal are important railway stations. There is a railway workshop at Jagadhari.

Aviation : There are civil aerodromes at Pinjore, Karnal, Hisar, Bhiwani and Narnaul.

TOURIST CENTRES

Haryana has a network of 44 Tourist Complexes in the State. Some of the important

tourist complexes are: Blue Jay (Samalkha), Skylark (Panipat), Chakravarty Lake and Oasis (Uchana), Parakeet (Pipli), Kingfisher (Ambala), Magpie (Faridabad), Dabchick (Hodal), Shama (Gurgaon), Jungle Babbler (Dharuhere), Gauriyya (Bahadurgarh), Myna (Rohtak), Blue Bird (Hisar), Red Bishop (Panchkula) and Pinjore Gardens (Pinjore). Surajkund and Badkhal Lake near Delhi, Sultanpur bird sancturary (Sultanpur, Gurgaon) and Damdama in Gurgaon and fascinating pocket of pines at Morni Hills are other attractions of tourist interest. The famous Surajkund Crafts Mela is held every year in the month of February.

GOVERNMENT

Governor	:	Dr. A.R. Kidwai	Chief Secretary	:	Prem Prashant
Chief Minister	:	Bhupinder Singh Hooda	Jurisdiction of High Court	:	Punjab and Haryana
Speaker	:	Dr. Raghuvir Singh Kadian			

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

District	Area (sq km)	Population	Headquarters
Ambala	1,574	10,14,411	Ambala
Bhiwani	4,778	14,25,022	Bhiwani
Faridabad	2,151	21,94,586	Faridabad
Fatehabad	2,538	8,06,158	Fatehabad
Gurgaon	2,714	16,60,289	Gurgaon
Hisar	3,983	15,37,117	Hisar
Jhajjar	1,834	8,80,072	Jhajjar
Jind	2,702	11,89,827	Jind
Kaithal	2,317	9,46,131	Kaithal
Karnal	2,520	12,74,183	Karnal
Kurukshetra	1,530	8,25,454	Kurukshetra
Mahendergarh	1,899	8,12,521	Narnaul
Panchkula	898	4,68,411	Panchkula
Panipat	1,268	9,67,449	Panipat
Rewari	1,594	7,65,351	Rewari
Rohtak	1,745	9,40,128	Rohtak
Sirsa	4,277	11,16,649	Sirsa
Sonipat	2,122	12,78,830	Sonipat
Yamuna Nagar	1,768	10,41,630	Yamuna Nagar
Mewat	--	--	Nuh



HIMACHAL PRADESH

Area	: 55,673 sq km	Population	: 60,77,900 (Census 2001)
Capital	: Shimla	Principal Languages	: Hindi and Pahari

HISTORY AND GEOGRAPHY

Himachal situated in the heart of the Western Himalya, identified as "Dev Bhumi" is believed to be the abode of Gods and Goddesses. The entire State is punctuated with stone as well as wood temples. The rich culture and traditions has made Himachal unique in itself. The shadowy valleys,rugged crags,glaciers and gigantic pines and roaring rivers and exquisite flora and fauna compose the symphony that is for ever Himachal.

Himachal Pradesh came into being as a union territory in April 1948 as a result of integration of 30 princely states spread over 27,000 sq.km. In 1954, when another "C" class state of Bilaspur merged in Himachal Pradesh,its area increased to 28,241 sq.km. The position remained unchanged till 1966. On reorganisation of the State, the hilly areas of Punjab were merged with the State, increasing its size to 55,673 sq.km. Himachal Pradesh, today is quoted as a successful model of not only hill area development but also for having realised development in education, health and social services.

AGRICULTURE

Agriculture being the main occupation of the people of Himachal Pradesh has an important role in the economy of the state. It provides direct employment to about 69 per cent of the main working population. Income from agriculture and allied sectors accounts for nearly 22.1 per cent of the total State Domestic Product. Out of the total geographical area of 55.673 sq. km., area of operational holding is about 9.79 lakh hectare owned by 9.14 lakh farmers. The marginal and small farmers possess 86.4 per cent of the total land holdings. The cultivated area in the state is only 10.4 per cent. About 80 per cent of the area is rain fed and farmers depend on weather gods for rains. The food grain production in 2006-2007 has been 16 lakh M.tonnes.

HORTICULTURE

Nature has endowed Himachal Pradesh with a wide range of agro-climatic conditions which have helped the farmers to cultivate large varieties of fruits ranging from temperate to sub-tropical. The main fruits under cultivation are apple, pear, peach, plum, apricot nut and citrus fruits like mango, litchi, guava and strawberry. The total area under fruits, which was only 792 hectares in 1950 has increased to 2.23 lakh hectares now. Similarly, the fruit production has also increased from 1200

MT in 1950 to 6.95 lakh tonnes in 2007 seven lakh tonnes is the new target fixed for fruit production for year 2006-07. Horticulture generates gross domestic income of about Rs. 2200 crore annually.

The Horticulture Technology Mission for the integrated development of horticulture is being implemented with a total outlay of Rs. 80 crore during the tenth five-year plan period. This Mission is based on the "end to end approach" taking into account the entire gamut of horticulture development with all backward and forward linkages in a holistic manner. Under this scheme, four centres of excellence are being created in different Agro-Climatic Zones with common facilities like water harvesting, vermicompost, greenhouses, organic farming and farm mechanisation.

ROADS

Roads are the lifelines and major means of communication in the predominantly hill State of Himachal Pradesh. Out of its 55,673 sq. km area, 36,700 km is inhabited out which 16,807 inhabited villages are scattered over slopes of numerous hill ranges and valleys. Realising the importance of construction of roads for connecting production areas with market cantres, Himachal Pradesh Government has decided to connect every panchayat with roads in the next two years. When the Pradesh came into existence in 1948 there were 288 km. of roads. This number had gone up to 30,264 km by 15 August 2007.

HYDRO–POWER GENERATION

Himachal Pradesh has immense hydro-potential in its five river basins. Chenab, Rabi, Beas, Satluj and Yamuna which emanates from the western Himalayas pass through the State. The strategy of devlopment in the power sector comprises of expeditious actualisation of the Hydro Electric Potential and introduction of power sector reforms to bring efficiency in the sector and provide high quality power to the consumers at reasonable rates besides availablity of abundant power to industrial and tourism sectors. The total identified potential in the State stands at 21000 M.W which is one fourth of India's total hydro-power potential. Presently out of this 6,067 M.W has already been harnessed by various agencies. Projects aggregating to 7,602 M.W are under execution. It is on the cards that State will have about 11,000 M.W actualised potential by the end of 11th Plan.

There is no denying this fact in view of the way the Government has embarked upon an accelerated Power Development Programme. The State is speedily moving towards becoming a "Power State" of the Country. All the census villages in the State have been electrified and now left out hamlets are being covered.

INDUSTRIAL GROWTH

Industrial development has been given big boost in the State. Pollution free environment, abundant availability of power and rapidly developing infrastructure, peaceful atmosphere, and responsive and transparent administration are some of the added attractions and advantages that the entrepreneurs get in Himachal Pradesh. 349 large and medium and about 33,284 small-scale industrial units with an investment of about Rs. 4822.54 crore have been set up in the state generating employment for 2 lakh persons. The sector is contributing 17 per cent to the State Domestic Product and the annual turnover on this account is about Rs. 6000 crore.

The State has formulated a new Industrial Policy and Incentive Rules- 2004,

which provides attractive packages to the entrepreneurs for setting up Industrial Units in the State. 42 industrial areas and 15 Industrial Estates with all basic amenities have been developed in the State.

With a view to provide umbrella support to existing and new ventures, the State government has set up a State Level Single Window Clearance and Monitoring Authority (SLSWCMA) in Himachal Pradesh under the Chairmanship of Chief Minister to give permission to the entrepreneurs to set up industrial units in the State. This also solves all industry related and inter-departmental issues, monitors and reviews the progress of units already approved and proposed to be set up. This Authority is also focusing its attention on the development of quality infrastructure. Presently 7040 industrial units with an investment of about Rs. 27,380.99 crore envisaging employment to about 3 lakh persons have been approved. A proposal is also underway for setting up Special Economic Zone in Kangra,Una and other districts with an estimated cost of Rs.7580 crore.

The Central Government has also given attractive package for setting up of Industrial Units which also includes Income Tax Holidays. The State Government is also giving several attractive incentives including exemptions in excise duty.

INFORMATION TECHNOLOGY

The Government of Himachal Pradesh has developed an IT Vision-2010 in collaboration with NASSCOM to make Himachal Pradesh an IT destination. Under the IT policy, it has been decided to accord the status of industry to all IT projects including IT related services and educational institutions. As such, all the incentives available for industrial units are also being given to all IT units, and IT related services.

The use of IT in governance is aimed at having SMART (Simple, Moral, Accountable, Responsive and Transparent) government. The State Government official website at http: / / himachal.nic.in is a web portal providing citizen centric services to the citizens and it has got interfaces for getting inputs from the grass root level. Ist phase of the H.P. State wide Area Network (HIM SWAN) which has been completed has been connected to internet. In the Phase–I of HIMSWAN, H.P. Secretariat Local Area Network has been established with a provision to provide LAN connectivity to every third person. In the Phase-II of HIMSWAN all the district headquarters will be connected with state headquarter. Software Technology Park and High Speed Data Connectivity Facility in Shimla has started its activities. All IT units in the State have been given Income Tax holiday up to year 2007. Information Technology Park is proposed to be set up in the State in Solan district.

BIO-TECHNOLOGY

Keeping in view the importance of bio-technology, special emphasis is being laid on exploiting the vast bio-technology potential available in the state. A separate Department of Bio-technology has been set up in the state. State's own bio-technology policy has been formulated. All bio-technological units are entitled for incentives which have been allowed for industrial units. The State Government proposes to set up Bio-Technology Park in Solan District.

IRRIGATION AND WATER SUPPLY

Net sown area in the State was 5.83 lakh hectares till 2007.Villages have been provided with the facility of drinking water. Over 14,611 hand pumps have been

installed in the State so far. For better reform in water supply and irrigation sector, the State Government has taken up a WASH project with the total cost of Rs. 339 crore for irrigation as well as for drinking water supply schemes with Gesellschaft for Technische Zuoammeuorbeit (GTZ).

FORESTRY

The total geographical area of the state is 55,673 sq km. As per record, the total forest area is 37,033 sq. km. Out of this, 16,376 sq. km. area is not fit for tree growth comprising alpine pastures, area under permanent snow, etc. The cultivable recorded forest area is only 20,657 sq. km.

Efforts are being taken to bring maximum area under green cover by implementing State's own projects, Government of India's projects and also through external aided projects. The World Bank has also sanctioned a Rs. 365 crore Integrated Watershed Development Project for the Mid Himalayas. 545 panchayats of 42 devlopmental blocks in 10 districts would be covered during the next six years.There are 2 National Parks and 32 wild life sancturies in the State. Total area under wild life sanctuaries is 5562 Km area under National Parks is 1440 Km and total area of Protected Area Network is 7002 Km.

EDUCATION

Education is important for over-all development of a State. Himachal Pradesh has emerged as the third best State in terms of over-all development and performance. The achievements of past three years have been lauded by India Today Survey. Himachal Pradesh has been adjudged number one State in Primary Education and teacher student ratio. Himachal Pradesh has witnessed literacy revolution as we are second only to Kerala in literacy. State has about 15,000 educational institutes, including three Universities, two Medical Colleges, one Engineering College in the Government Sector and a number of technical, professional and other educational institutions. The literacy percentage of the State according to 2001 Census is 77.13 which is much higher than the national average of 65.38. The State Government's emphasis now is to ensure qualitative improvement in the education besides need based expansion. Sarva Siksha Abhiyan an ambitious project worth Rs. 532 crore is being evolved with the main objective of achieving universalisation of elementary education with the sole aim to spread the light of knowlwdge to every nook and corner of the State.

TOURISM

Tourism Industry in Himachal Pradesh has been given very high priority and the Government has devloped an appropriate infrastructure for its devlopment which includes provision of public utility services, roads, communication network, airports, transport facilities, water supply and civic amenities, etc. The State Government is poised to transform the State into "A Destination for All Seasons and All Reasons". The State Tourism Devlopment Corporation contributes 10 per cent to the State exchequer. The corporation contributes more than Rs. 2.00 crore per annum by way of Sales tax, luxury tax and passanger tax. In the year-2007,tourist arrivals in the State were 8.3 million of which 2008 lakh were foreigners.

The State has a rich treasure of places of pilgrimage and of anthropological value. The State has also the pride of being the home to Rishies like Vyas,Parashar,Vashist, Markandey and Lamas, etc. Hot water springs,historic forts,

natural and man-made lakes, shepherds grazing their flock are sources of immense pleasure and joy to the tourist.

The State Government is aiming at promoting sustainable tourism,encouraging private sector to develop tourism related infrastructure in the State without disturbing the existing ecology and environment. The main thrust is on employment generation and promoting new concepts of tourism in the State. In order to increase the duration of the stay of the visitors / tourists, a special emphasis is being laid on the development of activities-based on tourism.

For the promotion and development of the State from the tourism point of view, the Government is focusing on the following areas : (1) History related tourism, (2) Identification of new areas / tourist destinations and promotion of village tourism. (3) Improvement of infrastructure, (4) Pilgrimage tourism. (5) Tribal tourism. (6) Eco-tourism. (7) Health tourism. (8) Promotion of adventure tourism. (9) Wildlife tourism. (10) Cultural tourism.

For the year 2006-07, there is an allotment of Rs. 6276.38 lakh for the devlopment of tourism in the State. A sum of Rs. 8 crore for the devlopment of Kullu-Manali-Lahaul and Spiti and Leh Monastic curcuit, Rs.21.00 crore for Kangra,Shimla and Sirmaur Circuit, Rs.16.00 crore for Bilaspur-Mandi and Chamba circuit and Rs.30.00 lakh for construction of tourism information centre at Manali has been sanctioned by the Government of India. Rs.67.57 crore Central financial assistance has been received for 1545 projects in respect of festivals and other major events.

GOVERNMENT

Governor	:	V.S. Kokje	Chief Secretary	:	Ravi Dhingra
Chief Minister	:	Virbhadra Singh	Jurisdiction of		
Speaker	:	Gangu Ram Musafir	High Court	:	Himachal Pradesh

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

District	Area (sq km)	Population (2001 Census)	Headquarters
Bilaspur	1,167	3,40,885	Bilaspur
Chamba	6,528	4,60,887	Chamba
Hamirpur	1,118	4,12,700	Hamirpur
Kangra	5,739	13,39,030	Dharamshala
Kinnaur	6,401	78,334	Reckong Peo
Kullu	5,503	3,81,571	Kullu
Lahaul & Spiti	13,835	33,224	Keylong
Mandi	3,950	9,01,344	Mandi
Shimla	5,131	7,22,502	Shimla
Sirmaur	2,825	4,58,593	Nahan
Solan	1,936	5,00,557	Solan
Una	1,540	4,48,273	Una



JAMMU AND KASHMIR

Area	: *2,22,236 sq km	Population	: 1,00,69,987 (2001 Census)
Capital	: Srinagar (Summer) Jammu (Winter)	Principal Languages	: Urdu, Dogri, Kashmiri, Pahari, Punjabi, Ladakhi, Balti, Gojri and Dadri

HISTORY AND GEOGRAPHY

According to the most popular legend that is also recorded in Rajtarangani and Nilmat Purana, two most authoritative books, Kashmir was once a large lake and it was Kashyap Rishi who drained off the water, making it a beautiful abode. But geologists have their own theory, which says that geographical changes made way for the outflow of water by subsidence of the mountain at Khadianayar, Baramulla and thus emerged the Valley of Kashmir, the paradise on earth. Ashoka introduced Buddhism to Kashmir in the 3rd century B.C. which was later strengthened by Kanishka. Huns got the control of the valley in the early 6th century. The Valley regained freedom in 530 AD but soon came under the rule of the Ujjain empire. After decline of the Vikramaditya dynasty, the valley had its own rulers. There was a synthesis of Hindu and Buddhist cultures. Lalitaditya (697-738 AD) extended his rule up to Bengal in the east, Konkan in the south, Turkistan in the northwest and Tibet in the northeast. Considered as the most famous Hindu ruler, he was known for constructing beautiful buildings. Islam came to Kashmir during 13th and 14th century AD. Zain-ul-Abedin (1420-70) was the most famous Muslim ruler, who came to Kashmir when the Hindu king Sinha Dev fled before the Tatar invasion. Later Chaks overran Haider Shah son of Zain-ul-Abedin. They continued to rule till 1586 when Akbar conquered Kashmir. In 1752, Kashmir passed on from the feeble control of the Mughal emperor of the time, to Ahmed Shah Abdali of Afghanistan. The Valley was ruled by the Pathans for 67 years.

Name of Jammu figures in the Mahabharata. Recent finds of Harappan remains and arteacts of Mauryan, Kushan and Gupta periods at Akhnoor have added new dimensions to its ancient character. The land of Jammu was divided into 22 hill principalities. Raja Maldev, one of the Dogra rulers, conquered many territories to consolidate his kingdom. Raja Ranjit Dev ruled over Jammu from 1733 to 1782. His successors were weak and thus Maharaja Ranjit Singh annexed the territory to Punjab. He later handed over Jammu to Raja Gulab Singh, a scion of the old Dogra

* includes 78,114 sq km under illegal occupation of Pakistan, 5,180 sq km illegally handed over by Pakistan to China and 37,555 sq km under illegal occupation of China. The population figures excludes population of areas under unlawful occupation of Pakistan and China where census could not be taken.

ruling family, who had grown powerful among Ranjit Singh's governors and had annexed almost the whole Jammu region. The State was governed by Dogra rulers till 1947 when Maharaja Hari Singh signed the Instrument of Accession in favour of the Indian Union on 26 October 1947.

Jammu and Kashmir State is situated between 32^0 15' and 37^0-05' north latitude and 72^0-35' and 83^0-20' longitude East. Geographically, the State can be divided into four zones. First, the mountainous and semi mountainous plain commonly known as Kandi belt, the second, hills including Shivalik ranges, the third mountains of Kashmir Valley and Pir Panchal range and the fourth is Tibetan tract of Ladakh and Kargil. Geographically and culturally the state has three distinct regions - Jammu, Kashmir and Ladakh.

INDUSTRY

Handicrafts, being the traditional industry of the State, has been receiving priority attention of the Government in view of its large employment base and expert potential. Paper-machie, wood carving, carpets, shawl-making, embroidery, etc., are among Kashmir's exquisite handicrafts. This industry, particularly the carpets earns substantial foreign exchange. The handicrafts sector provides employment to about 3.40 lakh artisans. The number of industrial units has gone up. The Rs 19 crore Export Promotion Industrial Park has been established at Kartholi, Jammu. A similar Park is being set up at Ompora, Budgam. Jammu has Urban Haats while a similar Haat is being commissioned in Srinagar. Software Technology park involving Rs 6.50 crore has been commissioned at Ragreth Srinagar.

AGRICULTURE

About 80 per cent population of the State depends on agriculture. Paddy, wheat and maize are the major crops. Barley, bajra and jowar are cultivated in some parts. Gram is grown in Ladakh. The area under orchards is 242 lakh hectatres. The State produces fruit worth Rs 2,000 crore annually including export of walnuts worth Rs 120 crore. Jammu and Kashmir State has been declared as Agri Export Zone for apple and walnuts. Market Intervention Scheme has also been launched for improving quality fruit for export by following the procedure of proper grading.

The horticulture sector, directly or indirectly, generates employment for 25 lakh people.

POWER

Top priotiry has been accorded to power sector with great thrust to tap State's vast hydroelectric potential estimated at 20,000 MW.

A new policy was announced to promote private invesment in small hydroelectric projects upto 25 MW. Seven hydel projects with generating capacity of 2798 MW have been given to NHPC for execution. The State's total requirement met by purchasing power from national grid.

EDUCATION

State's literacy rate is 54.46 per cent as per 2001 census with rural literacy of 48.22 per cent and urban 72.17 per cent. Male literacy is estimated at 67.75 per cent and female at 41.82 per cent.

TRANSPORT

Roads : The road length maintained by PWD in the State has reached to 15,012 kms. As many as 84 road projects are under execution.

Railways : At present, rail link extends up to Jammu only. Work on Jammu-Udhampur railway line has been completed. Work for extension of railway line to Srinagar and Barmulla has been taken up. Udhampur-Katra and Qazigund-Baramulla Rail link project has been taken up as national project which is likely to be completed by 2007.

Aviation : Srinagar, Jammu and Leh are major airports connecting Jammu and Kashmir with the rest of the country. The Srinagar airport has been upgraded to international level.

TOURISM

Kashmir Valley is described as the paradise on earth. Chashmashahi springs, Shalimar Bagh, Dal Lake, Dachigam, Gulmarg, Pahalgam, Sonamarg and Amarnath shrine in the Valley, Vaishnodevi shrine and Patnitop near Jammu and Buddhist monasteries in Ladakh are important tourist destinations. Ladakh festival on 15 September and Sindhu Darshan in June are popular events.

FESTIVALS

On the tenth day of the bright fortnight Assuj is celebrated as the day of victory of Rama over Rawana. Shivratri festival is also celebrated in Jammu and Kashmir. Four Muslim festivals celebrated in the State are Id-ul-Fitr, Id-ul-Zuha, Id-e-Milad-un-Nabi and Meraj Alam. Muharram is also observed. The Hemis Gumpa festival of Ladakh takes place in the month of June. A special feature of the Hemis festival is its mask dance. In Spituk monastry in Leh, enormous statues of Goddess Kali are exhibited once in the year on the occasion of the annual festival which falls in January. Other festivals celebrated are Lohri marking a climax of winter. Sinh Sankranti is observed in Ramban and adjoining villages. Mela Pat observed in Bhadarwah in the month of August.

GOVERNMENT

Governor	: Lt. Gen. (Retd.) S.K. Sinha	Chief Secretary	: C. Phonsog
Chief Minister	: Gulam Nabi Azad	Jurisdiction of High Court	: Jammu, Kashmir and Ladakh

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (sq km) (Estimated)*	Population	Headquarters
1.	Anantnag	3,984	11,70,013	Anantnag
2.	Badgam	1,371	6,32,338	Badgam
3.	Baramulla	4,588	11,66,772	Baramulla
4.	Doda	11,691	6,90,474	Doda
5.	Jammu	3,097	15,71,911	Jammu
6.	Kargil	14,036	1,15,227	Kargil
7.	Kathua	2,651	5,44,206	Kathua
8.	Kupwara	2,379	6,40,013	Kupwara
9.	Leh	82,655	1,17,637	Leh
10.	Pulwama	1,398	6,48,762	Pulwama
11.	Poonch	1,674	3,71,561	Poonch
12.	Rajouri	2,630	4,78,595	Rajouri
13.	Srinagar	2,228	11,83,493	Srinagar
14.	Udhampur	4,550	7,38,965	Udhampur



JHARKHAND

Area	:	79,714 sq km	Population	:	2,69,09,428
Capital	:	Ranchi	Principal Language	:	Hindi

HISTORY AND GEOGRAPHY

Jharkhand which came into being on 15 November 2000 as the 28th State of the Union is the homeland of the tribals who had dreamed of a separate state for a long time. According to legend, Raja Jai Singh Deo of Orissa had declared himself the ruler of Jharkhand in the 13th century. It largely comprises forest tracks of Chhotanagpur plateau and Santhal Pargana and has distinct cultural traditions. In post-Independence era, the Jharkhand Mukti Morcha started a regular agitation which impelled the government to establish the Jharkhand Area Autonomous Council in 1995 and finally a full-fledged State.

Jharkhand is bound by West Bengal in the east, Uttar Pradesh and Chhattisgarh in the west, Bihar in the north and Orissa in the south.

AGRICULTURE

The State has an area of 79,714 sq km of which 18,423 sq km is forest land. Agriculture and allied activities are the major source of Jharkhand's economy. The total cultivable land is only 38 lakh hectares.

IRRIGATION AND POWER

Damodar, Maurakshi, Barakar, North Koyel, South Koyel, Sankh, Subarnarekha, Kharkai, and Ajay are major water resources in the State. The net sown area is 1.8 million hectares of which 8 per cent is irrigated.

The installed capacity of power in Jharkhand is 2,590 MW. This includes 420 MW (Tenughat Thermal Power Station), 840 MW (Patratu Thermal Power Station), 130 MW (Sikkidiri Hydel Project) and 1,200 MW (Damodar Valley Corporation Thermal / Hydel Project). The prospects of capacity addition in both the thermal and hydel sectors of various power stations is 4,736 MW. This includes 686 Mw hydel generation.

INDUSTRY AND MINERALS

Some of Jharkhand's major industries are: Bokaro Steel Plant in the public sector, Tata Iron and Steel Company (TISCO)in Jamshedpur in the private sector. Other important industries are Tata Engineering and Locomotive Company (TELCO), Timken India Limited (Jamshedpur), Bharat Coking Limited (Dhanbad), Khilari Cement Factory (Palamu), Indian Aluminum (Muri). ACC cement (Chaibsa), Central

Coalfields Limited (Ranchi), Usha Martin, Usha Beltron, Uranium Corporation (I) Limited (Jadugora), Hindustan Copper Limited (Mussabani), Tin Plate Company of India Limited (Jamshedpur), Indian Explosive Limited (Gomia), and Hindalco Bauxite (Lohardaga), etc.

The State is rich in mineral resources. The important available minerals are coal, iron ore, lime stone, copper ore, bauxite, pyrite, china clay, kyanite, fine clay, dolomite, graphite, bentonite, soap stone, quartz sand and silica sand. The nascent state of Jharkhand has the enormous potential for exploitation of coal, mica and other minerals particularly in Singhbhum, Bokaro, Hazaribagh, Ranchi, Koderma and Dhanbad.

TRANSPORT

Roads : The total length of roads in the State is 4,311 km. This inlcudes 1,500 km national highways and 2,711 km state highways.

Railways : The state has a well-developed railway system. Ranchi, Bokaro, Dhanbad, Jamshedpur are some of the major railway stations.

Aviation : Ranchi is connected with Delhi, Patna and Mumbai. Jamshedpur, Bokaro, Giridih, Deoghar, Hazaribagh, Daltonganj and Noamundi have air strips.

TOURIST CENTRES

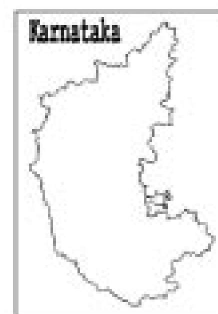
There are many scenic attractions in the state, namely, Ichagarh Bird Sanctuary, Udhava Bird Sanctuary-Sahibganj (Pathara Lake), Chachro Crocodile Breeding Centre–Koderma (Tilaya Dam), Chandrapura Bird Sanctuary, Jawaharlal Nehru Zoological Garden (Bokaro), Tenughat Bird Sanctuary, Dalma Wild Life Sanctuary (Jamshedpur), Tata Steel Zoological Park (Jamshedpur), Palkote Wild Life Sanctuary (Gumla), Bhagwan Birsa Zoological Gardens (Ranchi), Birsa Deer Sanctuary (Kalmati Ranchi), Betla National Park (Palamau), Ranchi Aquarium (Ranchi) and Hazaribagh National Park, Tatoloi hot water stream (Dumka) and Saranda Forest.

Apart from the above, Jharkhand has some famous temples like, Jharkhand Dham, Lagnta Baba Temple / Majar, Bindhvashini Temple, Masanjore Dam, etc.

GOVERNMENT

Governor	: Syed Sibtey Razi	Chief Secretary	: Manoj Kumar
Chief Minister	: Madhu Koda	Jurisdiction of High Court	: Jharkhand

Names of the districts : Ranchi, Gumla, Lohardaga, Palamau, Garhwa, Dhanbad, Bokaro, Hazaribagh, Chatra, Giridih, Kodarma, East Singhbhum, West Singhbhum, Dumka, Deoghar, Godda, Pakur and Sahebganj.



KARNATAKA

Area	:	1,91,791 sq kms	Population	:	5,28,50,562
Capital	:	Bangalore	Principal Language	:	Kannada

HISTORY AND GEOGRAPHY

Karnataka has a recorded history of more than 2,000 years. Apart from its subjection to the rule of Nandas, Mauryas and the Satavahanas, Karnataka came to have indigenous dynasties like the Kadambas of Banavasi and the Gangas from the middle of the 4^{th} century AD. The world renowned Gomateshwara monolith at Sharavanabelagola was installed by a Ganga minister Chavundaraya. The Chalukyas of Badami (500-735 AD) reigned over a wider area, from the Narmada to the Kaveri from the days of Pulikeshi II (609-642 AD) who even defeated the mighty Harshavardhana of Kanauj. This dynasty created fine, everlasting and the most beautiful monuments at Badami, Aihole and Pattadakal, both structural and rock-cut. Aihole has been one of the cradles of temple architecture in the country. The Rashtrakutas (753-973 AD) of Malkhed who succeeded them heaped tributes on the rulers of Kanauj successively in the so-called 'Age of Imperial Kanauj'. Kannada literature developed during this period. Outstanding Jain scholars of India lived in their court. The Chalukyas of Kalyana (973 AD to 1189 AD) and their feudatories, the Hoysalas of Halebidu built exiquisite temples, encouraged literature and various fine arts. Noted jurist Vijnaneshwara (work: Mitakshara) lived at Kalyana. The great religious leader Basaveshwara was a minister at Kalyana. Vijayanagar empire (1336-1646) patronised and fostered indigenous traditions and encouraged arts, religion and literature in Sanskrit, Kannada, Telugu and Tamil. Overseas trade flourished. The Bahamani Sultans (Capital: Gulbarga, later Bidar) and the Bijapur Adilshahis raised fine Indo-Saracenic buildings and encouraged Urdu and Persian literature. Advent of the Portuguese resulted in the introduction of new crops (Tobacco, Maize, Chillies, Groundnut, potato, etc). After the fall of the Peshwa (1818) and Tipu (1799), Karnataka came under British rule. Christian missionaries introduced English education and printing during the 19^{th} century. Revolution in transport, communication and industries was ushered in. The urban middle-class emerged. Mysore dynasty initiated and helped industrialisation and cultural growth.

Freedom Movement was followed by the movement for the unification of Karnataka. After Independence, the Mysore State was created in 1953, wherein all the Kannada dominant areas under different dispensations were unified and the enlarged Mysore state carved in 1956 and was renamed Karnataka in 1973.

Karnataka State is situated between $11^{0}31'$ and $18^{0}14'$ north latitudes and $74^{0}12'$ and $78^{0}10'$

FORESTRY AND WILDLIFE

The Forest department manages about 20.15% of the geographical area of the State. Forests have been classified as reserved forests, protected forests, unclassified forests, Villages forests, and private forests. There are 5 National Parks and 23 Wildlife sancturaries. To overcome shortage of fuel wood, fodder and timber, degraded forests and waste lands are being developed. Emphasis is also being laid on the conservation, protection and development of the fragile eco-system of the Western Ghats. Several Wildlife protection schemes such as Project Tiger and Project Elephant are being implemented with the Central assistance. The concept of Joint Forest Planning and Management applied to the 2 externally aided projects viz., Western Ghats Forestry & Environment Project (DFID) and Forestry and Environment Project for Eastern Plains (JBIS) has resulted in village forest planning and management through establishment of Village Forest Committees. Japan Bank for International Cooperation has approved a new scheme called Karnataka Sustainable Forest Management and Bio-diversity proejct and it is being implemented from 2005-06 to 2012-13 throughout Karnataka.

AGRICULTURE

Agriculture and allied activities account for nearly 56 percent of the work force in Karnataka State. Out of the geographical area of 1,90,49,836 hectares, 1,21,08,667 hectares area is accounted as AGRICULTURAL HOLDINGS and 62,20,798 farm families operate the same. Major food crops are paddy, jowar, ragi, maize, bajra, wheat, pulses, groundnut, sunflower, cotton, sugarcane and tobacco.

NEW SCHEMES

There are Eleven New Schemes in the State Sector, which is to be implemented as announced in the State Agriculture Policy 2006, Rs. 10180.25 lakhs have been proposedfor Eleventh Five Year Plan and Rs. 1675.00 lakhs for Annual Plan 2007-08.

HORTICULTURE

Horticulture crops are grown in an area of 16.30 lakhs hectares with an annual production of over 108 lakhs MTs. Horticulture provides excellent opportunities for raising the income of farmers even in the dry tracts. A significant shift towards horticulture is evident in the State with an increase in area and production. There is a clear indication that the farmers are shifting from agricultural crops to horticultural crops mainly because horticulture is less labour intensive and more remunerative.

MAJOR AND MEDIUM IRRIGATION

The Irrigation potential from all sources has been estimated at 55 lakh hectares comprising 35 lakh hectares under major & medium irrigation and 20 lakh hectares under minor irrigation, within which surface water and ground water sources are equally important. The potential created up to the end of March 2006 is 30.92 lakh hectares for flow irrigation, comprising 21.17 lakh hectares under minor irrigation (surface water).

POWER GENERATION

Karnataka was a pioneer in the development of hydropower and had a power surplus situation till the seventies. Due to rapid industrialisation and other structural problems it is facing acute power shortage. Karnataka is endowed with hydropower potential of about 7750 MWs of which only about 3396. MWs has been harnessed. Environmental issues connected with submersion of forests, rehabilitation of

displaced persons as well as delay in settlement of inter-State disputes have effected the full utilisation of available hydel potential.

The Karnataka Power sector had undergone a sea change in the last decade and is all set to undergo a paradigm shift in the next few years. Unbundling of the sector has resulted in five regional distribution companies (ESCOM's) and the one transmission company (KPTCL). State owned Generation is totally handled by Karnataka Power Corporation Limited (KPCL). Trading has been delinked from the Transmission Company (KPTCL) and the responsibility now vests with the respective ESCOMs. The Electricity Act 2003 provides lot of scope for brinigng radial change in the Sector. The regulatory regime in the State is in full force and had initiated several measures to bring the intended change int he Sector. Open Access hasbeen introduced and one of the major consumer has also been issued with the license to procure power as Open Access customer.

Transmission function in the State has improved to a great extent. The Losses have come down from 6.89% to 4.33% in the last four years. Unlike distribution, transmission requires a huge investment to expand the network. Overcome the constraints and to maintain the current level of performance.

ESCOM's are functioning independently and are striving hard to bring in efficiency and effectiveness in their operations. BESCOM (Bangalore Electricity Supply Company) made use of Information technology (IT) to improve its operation and customer services.

MINERALS

The Department of Mines and Geology is a century old department concentrating on the investigation of minerals and ores suitable for mineral based industries. Minerals available (Possible Availability in Million tonnes): Haematite (188); Magnetite (986); Gold Ore (0.68); Chromites (0.19); Limestone (9430); Bauxite (19.67); Dolomite (326.91); Managanese (24.17).

INFORMATION TECHNOLOGY AND BIO-TECHNOLOGY

The Information Technology has seen accelerated growth in the State. Karnataka has been in the forefront as far as the location and growth of the Information Technology sector is concerned, the State Government intends to encourage and sustain this growth by providing the necessary infrastructure and environment to facilitate and give impetus to the sector. A vision group was constituted for Bio-technology and the Bio-technology Policy has been announced. This is the new and emerging growth sector which government will promote by setting up a park.

Some other initiatives under the state schemes included creation of basic infrastructure for the growth of IT & BT in the State like establishment of Earth Station and Incubation centres in Secondary Cities, establishment of Hardware Technology Park, Development of IT & BT facilities at district level in assocaition with local engineering colleges.

Mukya Vahini

This scheme envisages consultancy Information System (CIS) by which data is collected in certain areas like profile of a vilage, education, health, housing water supply etc. to make them available to the respective decision makers.

Bio-tech Park

The Bio-tech Park is also being developed in electrinic city Phase-III Bangalore, which comprises:

a) Institutional and Research & Development Block proposed to house the Institute of Bio-informatics and applied Biotechnology (IBAB) and the Centre for Human Genetics (CHG)

b) Biotechnology Incubation and Common Instrumentation facilities.

c) Biotechnology Companies' Cluster.

TRANSPORT

Karnataka has formulated a road development policy covering the period 1998 to 2012. Under project, 2381 Km. of State Highways have been taken up for development by the State, at an estimaed cost of Rs. 203000.00 lakhs with World Bank assitance is nearing completion. The project period is from 2001 to 2007. Around 2078 Kms. are improved incurring an expenditure of Rs. 185000.00 lakhs. Rs. 25160.00 lakhs have been proposed for the Annual Plan 2007-08 and Rs. 25160.00 have been proposed for the Eleventh Five Year Plan for KSHHP-I.

Steps have been taken to improve additional prominent state highways of about 3000 Kms. at an estimated amount of Rs. 400000.00 lakhs under KSHIP-II project. Rs. 45000.00 lakhs have been proposed for the Annual Plan 2007-08 and Rs. 275000.00 lakhs have been proposed for the Eleventh Five Year Plan for KSHIP-II.

Rs. 500.00 lakhs have been proposed for the Annual Plan 2007-08 and rs. 2500.00 lakhs have been proposed for the Eleventh Five Year Plan.

Survey : Rs. 50.00 lakhs have been proposed for the Annual Plan 2007-08 and Rs. 250.00 lakhs have been proposed for the Eleventh Five Year Plan.

Railways : Rail network in Karnataka is 3172 km, which includes broad gauge (2761 km), metre gauge (411 km). Nearly 300 km is under conversion.

Aviation : Bangalore, Belgaum, Mangalore and Hubli are the main airports. Direct flight facilities to major cities of India are available from Bangalore. Some international flight activity already exists in the current HAL / Domestic Airport.

Ports : Karnataka has formulated a new port policy. The strategy adopted is to use private investment for the creation of port facilities, development of new sites and supporting infrastructure, maritime related industries, and coastal shipping and port facilities for power projects. The Karnataka Industrial Investment and Development Corporation has been appointed as nodal agency for implementation of this policy. A committee has been constituted to finalise the framework of agreement with private parties.

TOURISM

Karnataka "One State Many Worlds" is becoming Hub of tourist attraction of South India. The IT & BT Centre Bangalore has received more tourists in the recent past. There is phenomenal growth in tourist arrivals of over 40% in 2006-07 compared to 2005-06. The State is known for its Heritage monuments and Eco-Tourism destinations.

The luxurious train Golden Chariot passes through Bangalore, Mysore, Srirangapatna, Belur, Halebidu, Shravanabelagola. Hampi, Badami, Pattadkal, Aihole and Goa. For more details, enquiries@kstde.net or email:luxurytrain@kstde.net.

Karnataka has numerous Tourist attractions. The former princely capital Mysore with the Brindavan Gardens and Srirangapattana nearby, Sharavanabelgola famous for its monolithic statue of Gomateshwara (57 ft high), Belur, Helebid and

Somnathpura with the famous Hoysala monuments; Badami, Aihole and Pattadkal for the 1,300 year old rock-cut and structural temples; Hampi, the famous open air museum (ancient Vijayanagar); Gulbarga, Bidar and Bijapur, renowned for their Indo-saracenic monuments; Dakshina Kannada, Udupi and Uttara Kannada Districts for beautiful beaches; Mangalore and Karwar for ports; Chitradurga, Bidar, Basavakalyan and Gulbarga with attractive forts; Bandipur National Partk, Bannerghatta national Park the play grounds of Wild Life; Ranganthittu, Kokkre Bellur, Mandagadde, Gudavi, Attiveri the famous bird sanctuaries; Jog, Sathodi, Shivanasamudra, Mogod, Gokak, Abbey, Unchalli, Irupu, Hebbe, Kalhatti with their mesmerising Falls; Madikeri, Kemmannugundi, B.R.Hills, Nandi Hills, Kudremukh, Kodachadri the picturesque hill stations are the places of tourist interest. Dussehra, Hampi, Chalukya, Kadamba, Hoysala, Kodagu, Karaga festivals, depict the folk art and culture of Karnataka. Kabini River Lodge, K.Gudi, Cauveri Fishing Camp, Dhandeli Wilderness Camp, Devbagh are the unique Eco-Tourism projects. Gokarna, Udupi, Dharmasthala, Melukote, Gangappura, Saundatti, Kollur, Sringeri, Horanadu, Kalasa, Kukke Subramanya, Yediyur, Koodalasangama, Ulvi, Nanjangud are famous pilgrimage centres. Tourism Department has identified 215 tourist spots in the State. The capital city of Bangalore is also a tourist attraction with its famous huge granite structure Vidhana Soudha and the beautiful Cubbon Park and Lalbhag. Hampi and Pattadakal have been declared as World Heritage sites.

GOVERNMENT

Governor	: Rameshwar Thakur	Chief Secretary	: Prahlad B. Mahishi
		Jurisdiction of High Court	: Karnataka State

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (sq km)	Population	Headquarters
1.	Bagalkot	6,575	16,51,892	Bagalkot
2.	Bangalore	2,190	65,37,124	Bangalore
3.	Bangalore Rural	5,815	18,81,514	Bangalore Rural
4.	Belgaum	13,415	42,14,505	Belgaum
5.	Bellary	8,450	20,27,140	Bellary
6.	Bidar	5,448	15,02,373	Bidar
7.	Bijapur	10,494	18,06,918	Bijapur
8.	Chamarajanagar	5,101	9,65,462	Chamarajanagar
9.	Chikmagalur	7,201	11,40,905	Chikmagalur
10.	Chitradurga	8,440	15,17,896	Chitradurga
11.	Dakshina Kannada	4,560	18,97,730	Mangalore
12.	Davanagere	5,924	17,90,952	Davanagere
13.	Dharwad	4,260	16,04,253	Dharwad
14.	Gadag	4,656	9,71,835	Gadag
15.	Gulbarga	16,224	31,30,922	Gulbarga
16.	Hassan	6,814	17,21,669	Hassan
17.	Haveri	4,823	14,39,116	Haveri
18.	Kodagu	4,102	5,48,561	Madikere

19.	Kolar	8,223	25,36,069	Kolar
20.	Koppal	7,189	11,96,089	Koppal
21.	Mandya	4,961	17,63,705	Mandya
22.	Mysore	6,854	26,41,027	Mysore
23.	Raichur	6,827	16,69,762	Raichur
24.	Shimoga	8,477	16,42,545	Shimoga
25.	Tumkur	10,597	25,84,711	Tumkur
26.	Udupi	3,880	11,12,243	Udupi
27.	Uttara Kannada	10,291	13,53,644	Karwar
28.	Ramanagar			
29.	Chikkaballapur			



KERALA

Area	:	38,863 sq kms	Population	:	3,18,41,374
Capital	:	Thiruvananthapuram	Principal Language	:	Malayalam

HISTORY AND GEOGRAPHY

Kerala is in the extreme south-west of the Indian subcontinent. When independent India amalgamated smalls states together Travancore and Cochin states were integrated to form Travancore-Cochin State on 1 July 1949. However, Malabar remained under the Madras province. Under the State's Re-organisation Act 1956, Travancore-Cochin state and Malabar were united to form Kerala state on 1 November 1956.

In between the high Western Ghats on the east and the Arabian sea on the west, the width of the state varies from 35 km to 120 km. According to the geographical features, the state can be divided into hills, valleys, midland plains and costal belt. 44 rivers (41 west flowing and 3 east flowing) cut across Kerala with their innumerable tributaries and branches. The backwaters form an attractive and economically valuable feature of Kerala.

AGRICULTURE

A unique feature of the state is the predominance of cash crops. About 50 per cent of the population depends on agriculture. Kerala is a major producer of coconut, rubber, pepper, cardamom, ginger, cocoa, cashew, arecanut, coffee and tea. Spices like nutmeg, cinnamon, cloves, etc., are also cultivated. Rice and tapioca are the important food crops. The average annual decline in area under rice during the Eight Five-Year plan was around 22,000 ha, whereas it had come down to an average of 13,000 ha during the Ninth Plan period.

The unprecedented drought in recent years has contributed to the decline of paddy production during 2003-04 which was reversed in 2004-05. During 2004-05 maximum increase in rice production was recorded in Allappuzha (+75 per cent) and Palakkad (+37 per cent) compared to previous year.

Coconut is the most important cash crop of Kerala with a coverage of 9 lakhs ha. Coconut occupies 41 per cent of net cropped area and provides lively hood to over 3.5 million families.

Pepper is one of the major export oriented commodities in which the state continuous to enjoy a near monopoly in area and production.

Kerala has a substantial share in the four plantation crops of rubber, coffee, tea and cardamom. The four crops together occupy 6.53 lakh ha of the net cropped area in the state and 43 per cent of the area in the country.

Kerala accounts for 83 per cent of area under rubber in the country.

INDUSTRY

Kerala is rich in industrial potentialities and infrastructure facilities such as hydro-electric power, rich forests, rare minerals and the efficient system of transport and communications. Traditional industries are handloom, cashew, coir and handicrafts, other important industries are rubber, tea, ceramics, electric and electronic appliances, telephone cables, transformers, bricks and tiles, drugs and chemicals, general engineering, plywood splints and veneers, beedi and cigar, soaps, oils, fertilizers and khadi and village industry products. There are a number of manufacturing units for production of precision instruments, machine tools, petroleum products, paints, pulp paper, newsprint, glass and non-ferrous metals. Principal export products are cashew nut, tea, coffee, spices, lemon grass oil, sea foods, rose wood and coir. The state has an abundance of important minerals like ilmenite, rutile, monozite, zircon, sillimanite, clay and quartz sand.

The performance in the industrial export of almost all major products recorded positive growth.

The Government of Kerala assists, industrial units by providing financial assistance, infrastructure and training / consultancy services. The important agencies / departments engaged in industrial promotion are KFC, KSIDC, SIDBI, KINFRA, Directorate of Industries and Commerce, SIDC, SISI, KITCO & CMD.

The Directorate of Industries and Commerce provides infrastructure facilities for small-scale sector by acquiring land and developing it into developmental area / plots with facilities like developed land, road, water supply, electricity, necessary buildings, etc. The Small Industries Development Corporation also undertakes works on provision of infrastructure facilities for the small-scale sector through its major and mini industrial estates.

One of the major thrust areas for export promotion has been the Special Economic Zone. The scheme intends to set up Special Economic Zone in the country with a view to provide an internationally competitive and hassle free-environment for exports. Kochi is the only city in India having three Special Economic Zones – Electronic Parks at KINFRA in Kalamassery, Cochin SEZs, Port Based SEZs. Other SEZs are Malappuram Food Park, Technopark, proposed SEZ, Thiruvananthapuram Apparel Park, Film and Video Park and Animation SEZ (First Animation SEZ in India).

The small-scale industrial sector is one of the most dynamic and vibrant sectors in the Indian economy in terms of employment generation.

The Government of Kerala has drawn up an investment promotion programme named as Kerala Local Industry Promotion Programme (KLIPP) under the banner name of PRATHYASA through District Industries Centre.

INFORMATION TECHNOLOGY

Information technology and the ability to use it is increasingly being considered as the critical factor in generating and accessing wealth, power and knowledge and therefore societal welfare. The Government of Kerala has taken several steps for the development of IT in the State. Prominent among them are: (1) Technopark – Thiruvananthapuram – India's first world class, world - scale IT campus. (2.) IT Park at KINFRA at Kochi. (3) Akshaya Programme of Kerala IT Mission. (4) E-Governance initiatives of State Government like FRIENDS.

Technopark was conceived as an integrated IT environment with all necessary basic and enhanced infrastructural facilities that the industry needs. It acts as a single-point contact for most of the Government of India clearances and approvals.

Kerala has been selected as the second best state in India in implementation of e-governance. FRIENDS (Fast Reliable Instant Efficient Network for disbursement Service) is a "Single Window Mechanism" where citizens have the opportunity to pay all taxes and other financial dues to the Government.

E-pay is an online bill payment facility introduced by Government of Kerala through Akshaya e-kendras as an extension of FRIENDS project in Malappuram District during August 2004.

The citizen call centre the first of its kind in the country-setup in the state capital provides information on transactions pertaining to various government departments which are required by common citizens, over telephone.

IRRIGATION

Keeping in line with National Approach, Kerala also relied upon surface water irrigation system operating the gravitational force for distribution. A major chunk of the outlay on water resources sector was earmarked for major and medium irrigation. Out of a cumulative investment of Rs. 3572.40 crore made in March 2005, Rs. 2462.51 crore (69 per cent) was for major and medium irrigation.

The irrigation system in Kerala is serviced through major, medium and minor irrigation as well as ground water and command area development programmes. The completed major irrigation projects are Malampuzha, Chalakkudy, Peechi, Pampa, Periyar, Chittorpuzha, Kuttiyadi, Neyyar, Chimmini, Pazhassi, Kanjirapuzha and Kallada and the medium projects are Pothundy, Gayathri, Walayar, Vazhani, Mangalam and Cheerakuzhi. Construction works of four major projects Muvattupuzha, Idamalayar, Karapuzha, Kuriarkuty – Karappara and the medium projects Banasurasagar, Bridge-cum-regulator at Thrithala and Chammaravattom are in progress.

In Kerala an outlay of Rs. 930 crore is set apart for irrigation sector during 10th plan period which includes Rs. 600 crore for major and medium irrigation, Rs. 205 crore for minor irrigation for Rs. 50 crore for Flood Control and Anti-Sea Erosion work. During the first three years of plan period an amount of Rs. 435.95 crore was budgeted and expenditure for the period was Rs. 494.63 crore. The major portion of

the outlay on water resources sector was earmarked for major and medium irrigation projects.

The Command Area Development programme was launched with the main objective of bridging the gap between the irrigation potential created and utilised and improving agriculture production and productivity in the irrigation commands. The programme was restructured in 2003-04 and re-named as Command Area Development and Water Management Programme.

The main activities of Command Area Development Authority (CADA) include construction of field channels, field drains, enforcement of wara bandhi and reclamation of Water logged areas. The CAD activities were carried out in 16 completed irrigation projects, namely, Malampuzha, Mangalam, Pothundy, Walayar, Cheerakuzhy, Vazhani, Peechi, Chalakkudy, Neyyar, Gayatri, Pampa, Periyar Valley, Chitturpuzha, Kuttiyadi, Pazhachi and Kanjirapuzha with a total layout of 2.03 lakh ha. CADA programmes are implemented with financial assistance of Govt. of India. The achievement recorded during 2004-05 include construction of field channels in 1,998 ha, drains to benefit 6,156 ha, adaptive trials in 10ha, 83 training programmes, bench mark and evaluation studies in 2,302 ha. The work on reclamation of water locked areas was done in 1033 ha and 3 evaluation reports were also published.

POWER

The growth of power sector in Kerala during the last two decades has been remarkable. During the early stages of development, focus was on tapping hydro power potential in the state. Kerala Power System consists of 30 power generating stations which include 24 hydel, 5 thermal and one wind of which KSEB owns 24 hydel and one wind and two thermal stations.

The total installed capacity in Kerala as on 31 March 2005 is estimated as 2617.22 MW of which KSEB's hydel plants contribute 1810.60 MW, Wind farm at Kanchikode 2.0 MW and Thermal Power Plants 234.60 MW.

Malankara Hydro Electric Project was commissioned on 23 October 2005. As a result the installed capacity has been increased by 10.5 MW.

Under the micro-hydel programme, implementation of Micro Hydel Projects on behalf of two district Panchayats, Kammadi in Kasargode district and Chakkarakundu in Kozhikode district have been undertaken by ANERT. UNIDO has set up a Regional Centre on small hydro power at Energy Management Centre. The centre has prepared detailed project reports for 30 small hydro projects in Kerala. Of which 13 small hydro project were allotted to bidders under Captive Power Projects and Independent Power Projects on BOOT basis. The first off grid 100 KW micro hydel power projects was commissioned in Mankulam, Iduki District. Pasavaikumbe in Kasargode district and Kalyanathandu in Idukki district are two sites identified for study under the National Wind Energy Resource Assessment.

In the light of launching the project, Rajiv Gandhi Grameen Vidhyuteekaran Yojana (RGGVY) by the Government of India, proposals were submitted to the Government of India with an outlay Rs. 348.79 crore for the electrification of 3578 habitations in 930 villages covering 14 districts of Kerala. The Government of India have sanctioned Rs. 221.75 crore to implement the scheme as first phase covering seven districts in Kerala viz. Kasargod, Kannur, Wayanad, Kozhikode, Malappuram, Idukki, and Palakkad.

TRANSPORT

Transport system of the state consists of 1.61 lakh km of Road, 1148 km of Railways 1687 km of Inland Water Ways and 111 statute miles of Airways and 18 ports.

National Highways in Kerala

Sl. No.	Name	Length (kms)
1.	NH 17 – Thalappady – Edappally	420.777
2.	NH 47 – Walayar – Kaliyikkavila	416.800
3.	NH 47 A – Wellington Island to Kochi – Bypass	5.920
4.	NH 49 – Bodimettu – Muvatupuzha – Kochi	167.593
5.	NH 208 – Kollam – Aryankavu – Muvattupuzha	81.280
6.	NH 212 – Kozhikode – Kallegel	117.600
7.	NH 213 – Kozhikode – Palakkad	125.300
8.	NH 220 – Kollam – Kottayam – Kumily – Theni	190.300

Railway : The State has a total railway route of 1148 kms of which 111.14 kms are metre gauge and covers 13 railway routes. The work of guage conversion between Kollam and Punalur is in progress.

Aviation : Kerala has three air ports; viz, Thiruvananthapuram, Kochi (Nadumbassery) and Kozhikode. Of which the first two are international airports.

Port Sector : Along its coastline of 585 kms' Kerala has one major port at Kochi and 17 minor intermediate ports. The Prime Minister laid the foundation stone for the Vallarpadam International Container Transshipment Terminal on 16 December 2005. Completion of the prestigious project would make the Kochi Port as a major hubport in the Indian Ocean.

FESTIVALS

Kerala is the home of many colourful festivals. Most of them have a religious fervour inspired by Hindu Mythology. Onam is the most typical of Kerala festivals which coincides with the harvest season. It is now celebrated on astronomical New Year Day. Navarathri is celebrated as Saraswathi Pooja in Kerala. Maha Shivarathri is celebrated on the banks of Periyar river as a spectacular festival which is compared to Kumbhamela. The 41-day festival, which coincides with Makaravilakku in Sabarimala Ayyappan Temple, attracts lakhs of people from India and abroad. The Vallamkali or boat race is typical of Kerala. All the boat festivals have a religious origin except Nehru Trophy Boat race conducted in the Punnamada Lake. Thrissur celebrates Pooram festival in April - May every year with an impressive procession of caparisoned elephants and display of unparalleled pyrotechnics. Main Christian festivals are Christmas and Easter. Maramon Convention held every year on the Pumba riverbed is the biggest gathering of Christians in Asia. The Muslims celebrate Milade Shareef, Ramzan fasting, Id-ul-Fitr and Bakrid.

TOURISM

Tourism to Kerala is what apple growing is to Himachal Pradesh. Both these regions offer all the pre-conditions for sustained and successful growth of the respective activities. The factors stimulating a flourishing tourism sector include, scenic

splendour, moderate climate, clean environment, friendly and peace loving people with high tolerance for cultural diversity and the potential for creating unique tourism products.

Kerala has emerged as the most acclaimed tourist destination in the country. Beaches, warm weather, back waters, hill stations, water falls, wild life, Ayurveda, treatment year–round festivals and diverse flora and fauna make Kerala a unique destination for tourists.

The Department of Tourism, Kerala Tourism Development Corporation, District Tourism Promotion Council, Bakal Tourism Development Corporation, Local Government and Private Sector are the major players in the field. The thrust areas presently being looked into are the development of village tourism, MICE tourism (meeting, incentives, conventions and events / exhibitions / trade shows), heritage tourism, eco-tourism and medical tourism.

Thenmala Eco-Tourism project features a tourist facilitation centre, shop court garden, plazas, picnic areas, natural trail, rock climbing, river crossing, amphitheatre, restaurant, suspension bridge, lotus pond, musical dancing fountain, sculpture garden, deer rehabilitation centre, boating, battery powered vehicles, etc. During 2004-05, 104622 tourists visited Thenmala and the revenue generated was Rs. 3563820.

The foreign exchange earning from tourism during 2004 is Rs. 1266.77 crore. The earning from domestic tourists during 2004 is Rs. 3881.92 crore. Total revenue generated from tourism directly and indirectly in the state is worked out to about Rs. 6829 crore. Tourism employs about 8 lakh persons in the state. The investment in tourism is about Rs. 500 crore per year.

EDUCATION

According to 2001 census, the literacy rate in Kerala is well above the National average and it is the highest among the Indian States. The literacy rate in Kerala was 90.86 per cent in 2001 as against the all India rate of 65.38 per cent The male and female literacy rate are 94.2 per cent and 87.6 per cent respectively.

In Kerala there were 12644 schools in 2006 comprising 6817 lower primary schools, 3037 upper primary schools and 2790 high schools. Besides there are 587 CBSE School, 78 ICSE Schools, 26 Kendriya Vidyalayas and 13 Jawahar Navodaya Vidhyalayas.

The dropout rate is comparatively low in Kerala. During 2004-05 the dropout rate was 0.88 at LP level, 0.45 at UP level and 1.50 at HS level.

In order to reorganise secondary level of education in accordance with the National Educational Policy, Higher Secondary course was introduced in the state. As a first step during 1990-91, 31 government schools were upgraded to the status of Higher Secondary Schools. Grading system of evaluation has been introduced in Higher secondary levels from 2005-06 academic year onwards.

HEALTH

Kerala has achieved very good health standards in areas like birth rate, death rate, infant motality rate, maternal mortality rate, average life at birth and immunisation. In Kerala birth rate is 16.90, death rate - 6.40, IMR – 10 and MMR – 0.87 per thousand population. Though Kerala has attained better health care indicators, the people

are now facing the problem of high morbidity both from communicable and non-communicable diseases.

Kerala's health care system consists of Allopathy, Ayurveda and Homoeopathy. Three systems of medicines together have 2711 institutions in government sector.

Kerala spends fairly substantial amount on medical and public health which is evident from the per capita government health expenditure.

DRINKING WATER SUPPLY

In Kerala 83.07 per cent urban and 62.74 per cent rural population was being supplied with piped water supply by 2004-05. The overall water supply coverage is 68.02 per cent as against 67.52 per cent.

POVERTY ERADICATION

Kerala is seeking to achieve a breakthrough in participatory poverty reduction through local government and Kudumbasree Programmes implemented by State Poverty Eradication Mission. As per the NSSO 55th round, (1999-2000). Kerala's poverty is 9.35 per cent in rural areas and 20.27 per cent in urban areas.

GOVERNMENT

Governor	: R.L. Bhatia	Chief Secretary	: Lizzie Jacob
Chief Minister	: V.S. Achuthanandan	Jurisdiction of High Court	: Kerala and Lakshadweep

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

District	Area (sq km)	Population (2001 Census)	Headquarters
Thiruvananthapuram	2192	3234356	Thiruvananthapuram
Kollam	2491	2585208	Kollam
Pathanamthitta	2637	1234016	Pathanamthitta
Alappuzha	1414	2109160	Alappuzha
Kottayam	2208	1953646	Kottayam
Idukki	4358	1129221	Painavu
Ernakulam	3068	3105798	Ernakulam
Thrissur	3032	2974232	Thrissur
Palakkad	4480	2617482	Palakkad
Malappuram	3550	3625471	Malappuram
Kozhikode	2344	2879131	Kozhikode
Wayanad	2131	780619	Kalpetta
Kannur	2966	2408956	Kannur
Kasaragode	1992	1204078	Kasaragode



MADHYA PRADESH

Area	: 3,08,000 sq kms	Population	: 6,03,85,118
Capital	: Bhopal	Principal Language	: Hindi

HISTORY AND GEOGRAPHY

Madhya Pradesh is the second largest Indian Sate in size with an area of 308,000 sq.km. Geographically it occupies pivotal position in the country.

King Ashoka first among all, ruled over Ujjain. A sizeable portion of Central India was part of the Gupta empire (300-500 A.D.). The Muslims came into Central India in the beginning of 11th century. First of all, Mahmud of Ghazni came over here and then Mohammad Gouri who incorporated some parts of Central India into his ruling territory of Delhi. Central India was also part of the Mughal empire. Duing the period between the beginning of the influence of Marathas and the death of Madhoji Scindia in 1794, Marathas were on the ascendent in Central India but later on the small states started coming into existence. These small states became the cause of perpetuation of British power in the country.

Queen Ahilyabai Holkar of Indore, the Gond Maharani Kamalapti and Queen Durgawati, etc., were women rulers whose names have left an indelible imprint on Indian history for their outstanding rule. Madhya Pradesh came into being on 1 November 1956. It was reorganised on 1 November 2000 to create a new Chhattisgarh state. The successive state, now, is bound in north by Uttar Pradesh, east by Chhattisgarh, south by Maharashtra and west by Gujarat and Rajasthan.

AGRICULTURE

Agriculture is the mainstay of State's economy as 74.73 per cent of the people are rural. As much as 49 per cent of the land area is cultivable.

The net sown area during 2005-2006 was estimated at about 11.82 m. ha. The foodgrain production was 14.27m. metric tonnes. The productivity of major crops like wheat, rice, pulses has also been good. The National Horticulture Mission has been implemented in 20 districts. A separate Horticulture and Food Processing Department has been set up.

INDUSTRY AND MINERALS

Madhya Pradesh has entered the era of high-tech industries such as electronics, telecommunications, automobiles, Information Technology, etc. The state produces optical fibre for telecommunication needs. A large number of automobile industries have been established at Pithampur near Indore. Prominent industries in the public sector in the state are Bharat Heavy Electricals Ltd. at Bhopal, Secruity paper mill at

Hoshangabad, Bank Note Press at Dewas, newsprint factory at Nepanagar and alkaloid factory at Neemuch.

The cement production touched 12.49 million metric tonne during the period. An air cargo complex is coming up at Pithampur. The Government of India has set up a Special Economic Zone at Indore. Foreign Direct Investment is being promoted by implementing the comprehensive Economic Development Policy. The state government has announced an Industries Promotion Policy offering attractive incentives for investment in the state. Letters of intent for establishment of industries with an investment of Rs. 5200 crore have since been received. The docks have been cleared for the long pending Rs. 10,300 crore Oman Bina Refinary Project at Bina in Sagar district. The Government of India has also sanctioned a National Auto Testing and Research and Development Infrastructure Project to be set up at Pithampur in Dhar district.

The State Government has implemented a new I.T. Policy to attract private investment in I.T. sector.

Madhya Pradesh is a mineral rich state. The state produced minerals worth Rs. 5312.65 in 2005-06. It produces 21 types of minerals. The output of minerals in 2006 was -dolomite -128 thousand metric tonnes, diamond - 44149 thousand carats, limestone-25865 thosuand metric tonnes, bauxite-87 thousand million metric tonnes and copper ore - 1706 thousand million metric tonnes. The coal production was 54000 thousand metric tonnes. The State is famous for its traditional handicrafts and handloom cloth manufactured in Chanderi and Maheshwar.

IRRIGATION AND POWER

The net area under irrigation was 6.19 million-hectare in the year 2004-2005. There is a target to increase the irrigation facilities from 39 per cent to 50 per cent. A Rs.1919 crore Water Sector Restructuring Project has been taken up to restore irrigation facility in five lakh hectares by renovating the existing irrigation system in 30 districts.

Madhya Pradesh is rich in low-grade coal suitable for power generation and also has immense potential of hydro-energy. Total installed power generation capacity in year 2005-2006 was 7934.85 M.W. There are eight hydro-electric power stations with 902.5 MW installed capacity. A total of 50,475 out of 51806 villages had been electrified.

DEVELOPMENT INITIATIVES

Madhya Pradesh Rural Employment Scheme has been implemented in 18 districts. M.P. has topped in the country in its implementation. National Horticulture Mission has been launched to boost horticulture production and productivity in the state.

TRANSPORT

Roads : The total length of roads in the state is 73311 kms. The length of national highway in the state is 4280 km while State highway extends to 8729 kms. The state government has taken up the construction and upgradation of roads in a big way and about 60 thousand kilometres of roads will be constructed and upgraded. The year 2005 was observed as the Year of Roads during which every month construction of an important road was completed.

Railways : The main rail route linking northern India with southern India passes

through Madhya Pradesh. Main junctions in the state are Bhopal, Bina, Gwalior, Indore, Itarsi, Jabalpur, Katni, Ratlam and Ujjain. The divisional railways headquarters are at Bhopal, Ratlam and Jabalpur.

FESTIVALS

A number of festivals are celebrated in Madhya Pradesh. An important tribal festival is Bhagoriya marked by traditional gaiety and enthusiasm. Shivratri is celebrated in Khajuraho, Bhojpur, Pachmarhi and Ujjain and has its own local flavour while Ramnavami festival at Chitrakoot and Orchha has a unique sense of devotion imbued with tradition. Festivals of Orchha, Malwa, Pachmarhi bring to the fore, repertoire of culture and art of the people. Tansen Music Festival, Gwalior, Ustad Allauddin Khan Music Festival of Maihar, Kalidas Samaroh, Ujjain and Festival of Dances at Khajuraho are some of the well-known art festivals of Madhya Pradesh. An annual Narmada Festival has been started from this year at Bedhaghat in Jabalpur, famous for its marble rocks. A Shivpuri Festival has been started from this year at Shivpuri.

TOURIST CENTRES

Perfectly preserved medieval cities, refreshing and enchanting wildlife sanctuaries and some of the holiest and most revered pilgrim centres offer to the tourist the most fulfilling experience. Tranquil beauty of Pachmarhi, glittering splendour of Marble Rocks and roaring sound of Dhuandhar Fall at Bedaghat, Kanha National Park, with its unique Barasingha and Bandhavgarh National Park with its prehistoric caves and wildlife are some of the major attractions of the state. Gwalior, Mandu, Datia, Chanderi, Jabalpur, Orchha, Raisen, Sanchi, Vidisha, Udaygiri, Bhimbetika, Indore and Bhopal are the places well-known for their historical monuments. Maheshwar, Omkareshwar, Ujjain, Chitrakoot and Amarkantak are major centres of pilgrimage. Unique temples of Khajuraho are famous all over the world. The temples of Orchha, Bhojpur and Udaypur attract large number of tourists as well as pilgrims. Archaeological treasures are preserved in the museums at Satna, Sanchi, Vidisha, Gwalior, Indore, Mandsaur, Ujjain, Rajgarh, Bhopal, Jabalpur, Rewa and many other places. Omkareshwar, Maheshwar and Amarkantak have been declared as holy cities for their integrated development in accordance with their religious significance. Burhanpur is being developed as a new tourist destination.

GOVERNMENT

Governor	: Dr. Balram Jhakar	Chief Secretary	: R.C. Sahni
Chief Minister	: Shivraj Singh Chouhan	Jurisdiction of High Court	: Madhya Pradesh

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1	2	3	4	5
1.	Badwani	—	10,81,039	Badwani
2.	Balaghat	9,229	14,45,760	Balaghat
3.	Betul	10,043	13,94,421	Betul
4.	Bhind	4,459	14,26,951	Bhind

5.	Bhopal	2,772	18,36,784	Bhopal
6.	Chhatarpur	8,687	14,74,633	Chhatarpur
7.	Chhindwara	11,815	18,48,882	Chhindwara
8.	Damoh	7,306	10,81,909	Damoh
9.	Datia	2,038	6,27,818	Datia
10.	Dewas	7,020	13,06,617	Dewas
11.	Dhar	8,153	17,40,577	Dhar
12.	Dindori	—	5,79,312	Dindori
13.	Guna	11,065	16,65,503	Guna
14.	Gwalior	5,214	16,29,881	Gwalior
15.	Harda	—	4,74,174	Harda
16.	Hoshangabad	10,037	10,85,011	Hoshangabad
17.	Indore	3,898	25,85,321	Indore
18.	Jabalpur	10,160	21,67,469	Jabalpur
19.	Jhabua	6,782	13,96,677	Jhabua
20.	Katni	—	10,63,689	Katni
21.	Khandwa (East Nimar)	10,779	17,08,170	Khandwa
22.	Khargone (West Nimar)	13,450	15,29,954	Khargone
23.	Mandla	13,269	8,93,908	Mandla
24.	Mandsaur	9,791	11,83,369	Mandsaur
25.	Morena	11,594	15,87,264	Morena
26.	Narsinghpur	5,133	9,57,399	Narsinghpur
27.	Neemuch	—	7,25,457	Neemuch
28.	Panna	7,135	8,54,235	Panna
29.	Raisen	8,446	11,20,159	Raisen
30.	Rajgarh	6,154	12,53,246	Rajgarh
31.	Ratlam	4,861	12,14,536	Ratlam
32.	Rewa	6,314	19,72,333	Rewa
33.	Sagar	10,252	20,21,783	Sagar
34.	Satna	7,502	19,68,648	Satna
35.	Sehore	6,578	10,78,769	Sehore
36.	Seoni	8,758	11,65,893	Seoni
37.	Shahdol	14,028	15,72,748	Shahdol
38.	Shajapur	6,196	12,90,230	Shajapur
39.	Shayopur	—	5,59,715	Shayopur
40.	Shivpuri	10,278	14,40,666	Shivpuri
41.	Sidhi	10,256	18,30,160	Sidhi
42.	Tikamgarh	5,048	12,03,533	Tikamgarh
43.	Ujjain	6,091	17,09,885	Ujjain
44.	Umaria	—	5,15,851	Umaria
45.	Vidisha	2,742	12,14,759	Vidisha
46.	Ashoknagar	4,673.90	6,88,940	Ashoknagar
47.	Burhanpur	2,472.5	6,35,661	Burhanpur
48.	Anuppur	3,746	6,61,127	Anuppur



MAHARASHTRA

Area	: 3,07,713 sq km	Population	: 9,67,52,247
Capital	: Mumbai	Principal Language	: Marathi

HISTORY AND GEOGRAPHY

The first well-known rulers of Maharashtra were the Satavahanas (230 BC to 225 AD), who were the founders of Maharashtra, and have left a plethora of literary, epigraphic, artistic, and archaeological evidence. This epoch marks tremendous development in every field of human endeavour.

Then came the Vakatakas who established a pan-Indian empire. Under them Maharashtra witnessed an all-sided development in the fields of learning, arts and religion. Some of the Ajanta Caves and fresco paintings reached their pinnacle during their rule. After the Vakatakas and after a brief interlude of the Kalachuri dynasty, the most important rulers were the Chalukyas followed by the Rashtrakutas and the Yadavas apart from the Shilaharas on the coast. The Yadavas, with Marathi as their court language extended their authority over large parts of the Deccan.

While the Bahamani rule brought a degree of cohesion to the land and its culture, a uniquely homogeneous evolution of Maharashtra as an entity became a reality under the able leadership of Shivaji. A new sense of Swaraj and nationalism was evolved by Shivaji. His noble and glorious power stalled the Mughal advances into this part of India. The Peshwas established the Maratha supremacy from the Deccan Plateau to Attack in Punjab.

Maharashtra was in the forefront during freedom struggle and it was here that the Indian National Congress was born. A galaxy of leaders from Mumbai and other cities in Maharashtra led the Congress movement under the guidance of Tilak and then Mahatma Gandhi. Mahrashtra was the home of Gandhiji's movement, while Sevagram was the capital of nationalistic India during the Gandhian era.

The administrative evolution of the state of Maharashtra is the outcome of the linguistic reorganisation of the States of India, effected on 1 May 1960. The State was formed by bringing together all contiguous Marathi-speaking areas, which previously belonged to four different administrative hegemonies. They were the district between Daman and Goa that formed part of the original British Bombay Province; five districts of the Nizam's dominion of Hyderabad; eight districts in the south of the Central provinces (Madhya Pradesh) and a sizeable number of petty native-ruled state enclaves lying enclosed within the above areas, were later merged with adjoining districts. Located in the north centre of Peninsular India, with the command of the Arabian Sea through its Port of Mumbai, Maharashtra has a remarkable physical homogeneity, enforced by its underlying geology. The dominant

physical trait of the State is its plateau character. Maharashtra is a plateau of plateaus, its western upturned rims rising to form the Sahyadri Range parallel to the sea-coast and its slopes gently descending towards the east and south-east. Satpuda ranges cover northern part of the State, while Ajanta and Satmala ranges run through central part of State. Arabian Sea guards the western boundry of Maharashtra, while Gujarat and Madhya Pradesh are on the northern side. Chhattisgarh covers the eastern boundary of the State. Karnataka and Andhra Pradesh are on its southern side.

AGRICULTURE

About 65 per cent of the total workers in the State depend on agriculture and allied activities. Net irrigated area in 2003-2004 was 29.4 lakh hectares. Principal crops grown in the State are rice, jowar, bajra, wheat, tur, mung, urad, gram and other pulses. The State is a major producer of oilseeds. Groundnut, sunflower, soyabean are major oil seed crops. Important cash crops are cotton, sugarcane, turmeric and vegetables. The State has an area of 13.66 lakh hectares under various fruit crops like mango, banana, orange, grape, cashewnut etc.

INDUSTRY

The State has been identified as the country's powerhouse and Mumbai, its capital as the centre point of India's financial and commercial markets. Industrial sector occupies a prominent position in the economy of Maharashtra. Food products, breweries, tobacco and related products,cotton textiles, textile products, paper and paper products, printing and publishing, rubber, plastic, chemical and chemical products, machinery, electrical machinery, apparatus and appliances, and transport equipment and parts contribute substantially to the industrial production in the state. The growth in industrial production (manufacturing) in the state during 2005-06 was 8.9 per cent over the year

IRRIGATION AND POWER

By the end of June-2005, 32 major, 178 medium and about 2,274 state sector minor irrigation projects had been completed. Another 21 major and 39 medium irrigation projects are under construction. The gross irrigated area in 2004-2005 was 36.36 lakh hectares.

Maharashtra had an installed capacity of 12,909 MW in 2004-2005. The Plant Load Factor (PLF) in the State was 81.6 per cent and power generation was 68,507 million KWH.

TRANSPORT

Roads : Total length of roads in the State as in March 2005 was 2.29 lakh km consisting of 4,367 kms of national highways, 33,406 kms of state highways, 48,824 kms of major district roads, 44,792 kms of other district roads, and 97,913 kms of village roads.

Railways: Maharashtra has 5,527 kms of railway routes of which 78.6 per cent are broad gauge, 7.8 per cent meter gauge and 13.6 per cent narrow gauge.

Aviation : Maharashtra has a total of twenty-four Air fields / airports. Of these 17 are under the control of the State government, four are managed and controlled by the International Airports Authority / Airports Authority of India and three by the Ministry of Defence. The Airfields under the control of the State government have no facilities for the operation of commercial flights at present.

Ports : Mumbai is a major port. There are two major and 48 notified minor ports in the State.

TOURIST CENTRES

Some important tourist centres are : Ajanta, Ellora, Elephanta, Kanheri and Karla caves, Mahabaleshwar, Matheran and Panchgani, Jawhar, Malshej ghat, Amboli, Chikaldara, Panhala Hill stations and religious places at Pandharpur, Nashik, Shirdi, Nanded, Audha nagnath, Trimbakeshwar, Tuljapur, Ganpatipule, Bhimashanker, Harihareshwar, Shegaon, Kolhapur, Jejuri and Ambajogai.

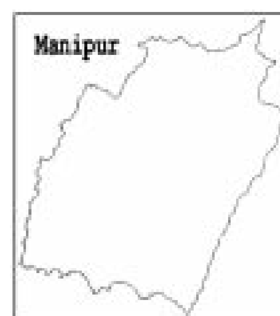
GOVERNMENT

Governor	: S.M. Krishna	Chief Secretary	: D.K. Shankaran
Chief Minister	: Vilasrao Deshmukh	Jurisdiction of High Court	: Maharashtra and Goa

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

Districts	Area (sq km)	Population (on '00) provisional	Headquarters
Ahmednagar	17,034	40,88,077	Ahmednagar
Akola	5,431	16,29,305	Akola
Amravati	12,235	26,06,063	Amravati
Aurangabad	10,106	29,20,548	Aurangabad
Bhandara	3,890	11,35,835	Bhandara
Beed	10,692	21,59,841	Beed
Mumbai City	157	33,26,837	Mumbai
Mumbai (Sub.)	446	85,87,561	Bandra
Buldhana	9,680	22,26,328	Buldhana
Chandrapur	11,417	20,77,909	Chandrapur
Dhule	8,061	17,08,993	Dhule
Gadchiroli	14,477	9,69,960	Gadchiroli
Jalgaon	11,757	36,79,936	Jalgaon
Jalna	7,715	16,12,357	Jalna
Kolhapur	7,692	35,15,413	Kolhapur
Latur	7,166	20,78,237	Latur
Nagpur	9,810	40,51,444	Nagpur
Nanded	10,545	28,68,158	Nanded
Nashik	15,539	49,87,923	Nashik
Osmanabad	7,550	14,72,256	Osmanabad
Parbhani	6,511	14,91,109	Parbhani
Pune	15,637	72,24,224	Pune

Raigad	7,162	22,05,972	Aligbag
Ratnagiri	8,196	16,96,482	Ratnagiri
Sangli	8,577	25,81,835	Sangli
Satara	10,475	27,96,906	Satara
Sindhudurg	5,222	8,61,672	Oras
Solapur	14,886	38,55,383	Solapur
Thane	9,563	81,28,833	Thane
Wardha	6,311	12,30,640	Wardha
Yavatmal	13,594	24,60,482	Yavatmal
Nandurbar	5,035	13,09,135	Nandurbar
Washim	5,150	10,19,725	Washim
Gondia	5,430	12,00,151	Gondia
Hingoli	4,526	9,86,717	Hingoli



MANIPUR

Area :	22,327 sq km	Population :	22,93,896 (2001 Census)
Capital :	Imphal	Principal Language :	Manipuri

HISTORY AND GEOGRAPHY

Manipur has a long and glorious history from before the beginning of the Christian era. The recorded history of kingship started from 33 A.D., which marked the coronation of Pakhangba. After Pakhangba a series of kings ruled over the kingdom of Manipur. The independence and sovereignly of Manipur remained uninterrupted until the Burmese invaded and occupied it for approximately seven years in the first quarter of the 19th century (1819-1826). Then came the British Parmaountcy in 1891. Manipur regained independence along with the rest of India in 1947. When the Constitution of India came into force on the 26th January, 1950, Manipur became a Part C State under a Chief Commissioner in 1950 - 51, a Council of Advisors was introduced and in 1957 this was replacedby a territorial Council of 30 elected and 2 nominated members. Later in 1963 a Territorial Assembly of 30 elected and 3 nominated members was established under the Government of Union Territories Act, 1963. In December 1969 the Chief Commissioner was replaced by the Lt. Governor. Manipur became a full-fledged State on the 21st January, 1972 with a Legislative Assembly of 60 members of whom 19 are reserved for Scheduled Tribes

an one for Scheduled Castes. The state is represented in the Lok Sabha by two members and by one member in Rajya Sabha.

Manipur is situated on the eastern frontier of India. It is bounded on the east by Myanmar (Burma), on the north by the State of Naglaland, on the west by the State of Assam and the south by the State of Mizoram and Myanmar Manipur lies between 23.83 N and 25.68N latitude and between 93.03 E and 94.78E longitude. It has an area of 22.327 sq. kms. Physically, Manipur comprises two parts - the hills and the valley. The valley is at the centre surrounded by hills on all sies. The hill covers about 9/10 of the total area of the State. Manipur Valley is about 790 metres above the sea level. The hill ranges are higher on the north and gradually diminish in height as they reach the southern part of Manipur. The valley itself slopes down towars the south.

AGRICULTURE

Agriculture and allied activities is the only mainstay of the State's economy where about 70 percent of the population depends on it. Agriculture in the State is confined to 10.48 percent of the total geographical area. The irrigated area is 30,980 ha. i.e. 13.24 percent of the net agricultural land. The State is marginally deficit in cereals and highly deficit in the production of oilseeds and pulses. In spite of the rapid advancement in the crop productivity, the faster of population growth poses a great problem to agriculture in the State.

The State Agriculture Department now plans to go ahead with diversification and commercialization during the 11th Plan period with the following aims an objective : (i) To increase the Net Agricultural Area of the State to the tune of 3.86 percent and 18.68 percent Gross Agricultural Area over the 10th Plan achievement, (ii) To increase the cropping intensity to from the present level of 132.73 percent to 140.45 percent by the end of 11th, (iii) 7.97 Percent Annual growth rate of the over all crop production and targeted 39.85 percent increase in crop production by the end of 11th Plan over the 10th Plan achievement.

To achieve the above aims and objective, thrusts are given to the following areas : (i) Quality Seed Production, (ii) Assured Irrigation, (iii) Farm Mechanization, (iv) Soil Health Management, (v) Organic Farming, (vi) Multiple Cropping, (vii) Post Harvest Management, (viii) Regulation of Markets, (iv) Research and Development (R&D) in Bio-technology an Agro-processing, (x) Application of Information Technology (IT) in Agriculture and (xi) Transfer of Technology : (a) Establishment of Farmers Field School in each district and (b) Extension management.

FOREST

Total area under forest cover is 17,219 sq. kms. Out of which 720 sq. kms falls under very Dense Forest, 5,818 sq. kms falls under Dense Forest and 10,681 sq. kms falls under Open Forest. The forest cover accounts for 77.12% of the State's georaphical area 2.54 percent of the country's forest cover. Siroy hill range in Ukhrul district, Manipur is the abode of Siroy Lily (Lilium mackineae), the flower which is not found elsewhere in the world. The zuko valley is also the only habital of the enemic and the rarest species Dzuko Lily (Lilium chitrangade). Manipur is the only spt on earth in which the Brow-antlered deer (Cervus eldi eldi) lically known as **Sangai** is foun. This rare deer is surviving in its natural habital at the Keibul Lamjo.

This habital was declared as a National Park in the year 1977 covering an area

of 40 sq. kms. It is unique in its own physical feature as park lies submerged under water covered entirely on the surface by a floating entangle mass of vegetation like grass, shrubs and earth, called phumdi. There survives on top of this phumdi. The conservation measures taken up by the State has led to the rise of Sangai population from a mere 14 animals in the year 1975 for 180 in the year 2003.

The other area alreay eclared as protected area besides keibul Lamjo National Park is the Yangoupokpi - Lokchao Wildlife Sancturary with an area of 184.40 sq. kms. It is situate at Chanel District and is located on the ino-malayan Zoogeographical Zone. The Malayan sun bear is found in this wildlife sanctuary.

The State is very rich in bio-diversity. large areas are still girgin forests. These are the habitats of very rare plants of rich medicinal value like Taxus baccata, ginseng, etc. It is also the home of many rare orchis an ferns.

IRRIGATION

Major an Medium lrrigation had been introduced in the State from 1980. So far 8 (eight) Major and Medium Irrigation & Multipurpose Project have been taken up of which 5 (five) projects had been completed upto the end of VIIIth Plan.

Irrigation potential of 28,500 ha has been createdd with utilization of 21,850 ha. In addition 1,200 ha and 900 ha of low lying areas of Loushipat and Poiroupat respectively have been reclaime by thoubal Project. The modernization/ imporovement schemes are now planned for implementation in the XIth Plan and necessary fund is likely to be made available under Bharat Nirman Programme. 4 MGD of raw water is supplied to the State Public Health Engineering Department from Singda Multipurpose Project for water supply. 5 MGD of raw water is also being supplied from Khuga Multipurpose Project to state PHED from 2007.

At present, the State Government has given special attention to accelerate the progress of the three ongoing projects and to achieve completion of Khuga Multipurpose Project in 2007, Thoubal Multipurpose Project and Dolaithabi Barrage in 2008-09. The State Government is continuing investigation works for taking up new projects under State Plan as well as funding by NEC.

COMMERCE & INUSTRIES

Handloom industry is the largest cottage industry providing maximum number of employment after agriculture in the state. This industry has been flourishing since time immemorial. It remains an important source of income especially for women-folk of the State. The traditional skill of handloom weaving is not only a status symbol for the women-folk but also an indispensable aspect of the socio-economic life. Food Processing is another popular inustry in Manipur. In view of the importance of the industry. State Government has established a Food Processing Training Centre and Food Processing Trocessing Training Hall at Imphal. A Food Park is also being set up at Imphal.

Indo-Myanmar Border Trade through Lan Custom Station, Moreh was opened on 12th April, 1995. The opening of Border Trade has been providing large scale employment to many families in the State. The Department of Commerce and Industries of the State Government has been acting as a liaisoning agent for promotion and development of the Border Trade. To promote Border Trade, the Ware house, Conventional Hall and Stay Facility Centre have been set up a border town Moreh. The director General of Foreign Trade (G & T) Camp office has been opened in the Directorate of Commerce & Industries Complex, Imphal. Among the

other thrust areas, State Govt. contemplates to the setting up of anIntegrated Check Post at Moreh under the initiative of Ministry of Home Affairs, organizing a Trade Fair inviting various MNCs at the border point uner the supportive role of ITPO.

POWER

The installed capacity of the State of Manipur as on ecember 2006 was 50.9 MW. This is including Heavy Fuel Based Power Plant (6x6 MW0 at Leimakhong which were operated furing the Peak Hours as standby. Out of the 2315 villages (as per 2001 census) 1940 number of villages had been electrified by December 2005. The power supply of the State of Manipur depends upon the Central Sector Generating Stations located in the North Eastern Region. They were Loktak Hydro Electric Project of National Hydroelectric Power Corporation Ltd. (NHPC) an Kopili HE Project, Khandong HE Project, Doyang HE Project, ranganai HE Project, AGBPP, Kathalguri an AGTPP, Ramchandranagar of North Eastern Electric Power Corporation Ltd. (NEEPCO).

TRANSPORT

Roads: 3 National Highways - i) NH - 39, ii) NH - 53 an iii) NH - 150 criss-cross the State connecting all districts. Imphal, the capital of Manipur is joined by NH-39 with Nagaland on the North and myanmar on the east, on the west with Assam by NH-53 and Mizoram on the south by NH-150

Aviations : Imphal Airport is the second largest airport in the North Eastern Region Imphal is connected to Aizwal, Guwahati, Kolkata, Silchar and New Delhi by Indian Airlines, Jet Airways, Indigo and Air Deccan and Alliance Air. New flights from carrier like Spicejet and Kingfisher are likely to operate very soon.

Railways: The State is include in the railway map of India with opening of a rail head at Jiribam in May, 1990. It is 225 km from Imphal. Dimapur (Nagaland), 215 kms. from Imphal is the nearest rail-head.

The Jiribam - Tupul Railway line has been declared as a National Project. The final location survey of 52 kms has been completed. Lan acquisition in first 10 kms is in advance stage. During feasibility study, it has been found feasible to extend the line from Tupul to Imphal.

FESTIVALS

A year in Manipur represents a cycle of festivities. Hardly a month passes by without a festival which to the Manipuris is a symbol of their social, cultural and religious aspirations. Important festivals of the State are : Lai Haraoba, Rasa Leela, Cheiraoba, Ningol Chak-Kouba, Rath-Jatra, Idul Fitre, Imoinu Iratpa, Gaan-Ngai, Lui-Ngai-Ni, Idul Zuha. Yaoshang (Holi), Durga Pujah, Mera Houchongba, Diwali, Kut, Christmas, etc.

TOURIST CENTRES

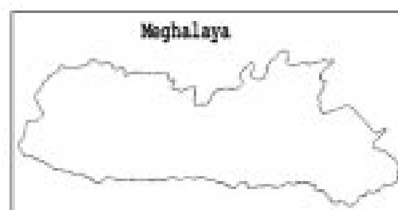
Blessed with a salubrious climate an landscapes languishing in natural beauty and scenic splendour, the state extens to the tourists a warm welcome to visit again and again. Some important tourist centres in the State are : Kangla, Shree Shree Govindajee Temple, Khwairamband Bazar (Ima Keithel), War Cemeteries, Shaheed Minar, Npi Lan (Women's War) Memorial Complex, Khonghampat Orchidarium, INA Memorial (Morang), Loktak Lake, Keibul Lamjao National Park, Bishnu Temple at Bishnupur, Sendra, Moreh, Siroy village, Siroy Hills, Dzuko Valley, State Museum, Kaina tourist Home, Khongjom War Memorial Complex, India Peace Memorial (re Hill) etc.

GOVERNMENT

Governor	: Dr. S.S. Sidhu	Chief Secretary	:	Shri Jarnail Singh
Chief Minister	: O. Ibobi Singh	Jurisdiction of High Court	:	A permanent bench of the Guwahati High Court, Imphal Bench started functioning from 14 March 1992. The Chief Justice of India laid foundation stone for construction of a new High Court Complex on 30th April, 2006
Speaker	: Dr. Sapam Budhichandra Singh			

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.N.	District	Area	Population	Headquarters
1.	Senapati	3,271	2,83,621	Senapati
2.	Ukhrul	4,544	1,40,778	Ukhrul
3.	Chandel	3,313	1,18,327	Chandel
4.	Churachandpur	4,570	2,27,905	Churachandpur
5.	Tamenglong	4,391	1,11,499	Tamenglong
6.	Imphal (West)	519	4,44,382	Lamphel
7.	Imphal (East)	709	3,94,876	Porompat
8.	Thoubal	514	3,64,140	Thoubal
9.	Bishnupur	496	2,08,368	Bishnupur



MEGHALAYA

Area	: 22,429 sq km	Population	: 23,18,822(2001 Census)
Capital	: Shillong	Principal Languages	: Khasi, Garo and English

HISTORY AND GEOGRAPHY

Meghalaya was created as an autonomous State within the State of Assam on 2 April 1970. The full-fledged State of Meghalaya came into existence on 21 January 1972. It is bound on the north and east by Assam and on the south and west by Bangladesh. Meghalaya, which literally means 'the Abode of Clouds' is essentially a hilly state. It is predominately inhabited by the Khasis, the Jaintias and the Garos tribe communities. The Khasi Hills and Jaintia Hills which form the central and eastern part of Meghalaya from an imposing plateau with rolling grassland, hills and river valleys. The southern face of the plateau is marked by deep gorges and abrupt slopes, at the foot of which, a narrow strip of plain land runs along the international border with Bangladesh.

ARGICULTURE

Meghalaya is basically an agricultural State in which about 80 per cent of its population depends primarily on agriculture for their livelihood. The State has a vast potential for development of horticulture due to the agroclimatic variations, which offer much scope for cultivation of temperate, sub-tropical and tropical fruits and vegetables.

Besides major food crops of rice and maize, Meghalaya is renowned for its orange (Khasi Mandarian), pineapples, bananas, jackfruit, temperate fruits like plum, pear and peach, etc. Cash crops, popularly and traditionally cultivated include potato, turmeric, ginger, black pepper, arecanut, betelvine, tapioca, short staple cotton, jute and mesta, mustard and rapeseed. Special emphasis is presently being laid on non-traditional crops like oilseeds (groundnut, soyabean and sunflower), cashewnut, strawberry, tea and coffee, mushroom, medicinal plants, orchids and commercial flowers.

INDUSTRIES

The Meghalaya Industrial Development Corporation Limited, as the Industrial and Financial Institution of the State, has been rendering financial assistance to the local entrepreneurs. District Industries Centres have been working in the field for the promotion and development of small-scale, village, tiny and cottage industries. A number of industrial projects have been set up for the manufacture of iron and steel materials, cement and other industrial products.

FESTIVALS

A five-day-long religious festival of the Khasis 'Ka Pamblang Nongkrem' popularly known as 'Nongkrem dance' is annually held at Smit village, 11 km from Shillong. 'Shad Sukmynsiem', another important festival of the Khasis is held at Shillong during the second week of April. 'Behdeinkhlam', the most important and colourful festival of the Jaintias is celebrated annually at Jowai in Jaintia Hills in July. 'Wangala festival' is observed for a week to honour Saljong (Sungod) of the Garos during October – November.

TOURIST CENTRES

Meghalaya is dotted with a number of lovely tourist spots where nature unveils herself in all her glory. Shillong, the capital city, has a number of beautiful spots. A few of them are Ward's Lake, Lady Hydari Park, Polo Ground, Mini Zoo, Elephant Falls, Shillong Peak overlooking the city and the Golf Course which is one of the best in the country.

TRANSPORT

Roads: Six national highways pass through Meghalaya. The State has 7,328 km of both surfaced and unsurfaced roads.

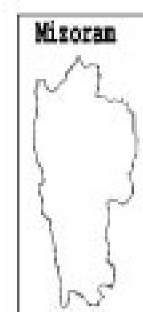
Aviation: The only airport in the State at Umroi, is 35 km from Shillong.

GOVERNMENT

Governor	: M. M. Jacob	Chief Secretary	: R. Chatterjee
Chief Minister	: D.D. Lapong	Jurisdiction of High Court	: Falls under the jurisdiction of Guwahati High Court. There is a High Court Bench at Shillong.

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

District	Area (sq km)	Population	Headquarters
East Khasi Hills	2,820	6,60,923	Shillong
West Khasi Hills	5,247	2,96,049	Nongstoin
Ri-Bhoi	2,448	1,92,790	Nongpoh
Jaintia Hills	3,819	2,99,108	Jowai
East Garo Hills	2,603	2,50,582	Williamnagar
West Garo Hills	3,677	5,18,390	Tura
South Garo Hills	1,887	1,00,980	Baghmara



MIZORAM

Area : 21,081 sq km	Population : 8,91,058
Capital : Aizawl	Principal Languages : Mizo and English

HISTORY AND GEOGRAPHY

Mizoram is a mountainous region which became the 23rd state of the Indian Union in February 1987. It was one of the districts of Assam till 1972 when it became a Union Territory. After being annexed by the British in 1891, for the first few years, Lushai Hills in the north remained under Assam while the southern half remained under Bengal. Both these parts were amalgamated in 1898 into one district called Lushai Hills District under the Chief Commissioner of Assam. With the implementation of the North-Eastern Reorganisation Act in 1972, Mizoram bacame a Union Territory and as a sequel to the signing of the historic memorandum of settlement between the Government of India and the Mizo National Front in 1986, it was granted statehood on 20 February 1987. Sandwiched between Myanmar in the east and the south and Bangladesh in the west, Mizoram occupies an area of great strategic importance in the north-eastern corner of India. Mizoram has great natural beauty and an endless variety of landscape. It is rich in fauna and flora.

The origin of the word ‘Mizo’ is not known. The Mizos came under the influence of the British Missionaries in the 19th Century. Now most of the Mizos are Christians. Mizo language has no script of its own. The missionaries introduced the Roman script for the Mizo language and formal education. Literacy in the state has grown rapidly, and Mizoram literacy at 88.8 per cent today, is the second highest in the country. The state government is striving hard to attain the top position in the near future.

AGRICULTURE

About 80 per cent of the people of Mizoram are engaged in agricultural pursuits. The main pattern of agriculture followed is Jhum or Shifting cultivation. Of the total 21 lakh ha. of land estimated, 6.30 lakh hectares of land is available for cultivation of horticulture crops. The existing area under different horticulture crops account for about 4127.6 hectares, which is only 6.55 per cent of the estimated potential area. This indicates the vast scope for horticulture crops to flourish in Mizoram. The main horticulture crops are Mandarin Orange, Banana, Passion Fruit, Grapes, Hatkora, Pineapple, Papaya, etc., and flowers like Anthurium, Bird of Paradise, Orchid, Chrysanthemum, Rose and other subsidiary seasonal flowers. Spices like Ginger, Turmeric, Black Pepper and Bird's eye Chillies are also grown. People have also started extensive cultivation of oil palm, medicinal and aromatic plants.

IRRIGATION

The ultimate surface irrigation potential is estimated at 70,000 hectares of which 45,000 hectares is under flow and 25,000 hectares by construction and 70 pucca minor irrigation projects and six lift irrigation projects for raising double and triple crops in a year are nearing completion.

INDUSTRY

The entire Mizoram is a Notified Backward Area and was categorised under 'No Industry District' in mid seventies. With the announcement of State Industrial Policy 1989, few modern small-scale industries have come up during the past decade. To further accelerate growth of industries, a New Industrial Policy of Mizoram was announced in the year 2000. The Policy identified thrust areas like Electronics and Information Technology, Bamboo and Timber based products, Food and Fruit Processing, Textiles, Handloom and Handicrafts, etc.

In order to attract investment from outside the state, the Policy permits joint venture for all large, medium and small scale industries with local partners. Infrastructural development like Industrial Growth Centre (IGC) at Luangmual, Aizawl, Export Promotion Industrial Park (EPIP) at Lengte, Integrated Infrastructural Development Centre (IIDC) at Pukpui, Lunglei and Food Park at Chhingchhip are nearing completion, apart from upgradation of the existing industrial estates.

Scientific cultivation of Tea has also been taken up. Establishment of Apparel Training and Design Centre, Gems cutting and polishing are in the pipeline to encourage setting up of Export Oriented Units (EOUs). Of the cottage industries, Handloom and Handicrafts are given high priority and the two sectors are flourishing to meet consumers demand in the state and in the neighbouring states of Meghalaya, Nagaland, etc.

With the opening up of border trade with Myanmar and Bangladesh, and the 'Look East Policy' of the Government of India coupled by peaceful condition of the state, Mizoram will no more be a remote corner state of the country, and as a result of which industrialisation will substantially gain momentum in the near future.

POWER

Construction of Tuirial HEP (60 MW) is in progress. Survey and investigation works of Kolodyne HEP (500 MW) has been completed by CWC. This project provides inland water transport facilities for the region besides generating 500 MW of power

and the Government of Mizoram has given paramount importance to it. 3 MW capacity Tuipanglui and Kau-Tlabung SHPs were commissioned recently thus enhancing the state's hydro generation by 15 MW capacity. Works on Maicham-II (3MW), Serlui 'B' (12MW) and Lamsial (0.5 MW) SHPs are in progress and expected to be commissioned during 2007.

A Total of 695 villages have been electrified and 709 km of 132 kv line completed.

TRANSPORT

Total road length in the state is 5,982.25 km (BRO & State PWD). Rail link in the state has been established at Bairabi. Aizawl is connected by air. In order to have a better connectivity, the Government has undertaken the Mizoram State Roads Projects with a total cost of Rs 350 crore under funds provided by the World Bank. Connectivity under PMGSY covering a total length of 2,421 km connecting 384 villages of Mizoram is making steady progress.

FESTIVALS

Mizos are basically agriculture oriented. All their activities centre around jhum cultivation and their festivals are linked with such agricultural operations. Kut is the Mizo term for festival. Among the various cultural festivals, only three viz. Chapchar Kut, Mim Kut & Thalfavang Kut are observed today.

TOURIST CENTRES

Aizawl, located at nearly 4,000 ft. above sea level, is a religious and cultural centre of Mizoram. Champhai is a beautiful resort on the Myanmar border. Tam Dil, a natural lake with virgin forests, is 80 km from Aizawl and 10 km from Tourist Resort of Saitual. Vantawng Falls, 5 km from the town of Thenzawl, is the highest and most beautiful waterfall in Mizoram. The department of Tourism has opened Tourist Lodges in all the bigger towns all over the state, and Highway Restaurants and Travellers' Inns in other townships. There is also a Recreational Centre at Beraw Tlang, Aizawl and Alpine Picnic Hut at District Park near Zobawk.

GOVERNMENT

Governor	: Lt. Gen. (Retd.) M.M. Lakhera	Chief Secretary	: Hauzel Haukhum
Chief Minister	: Zoramthanga	Jurisdiction of High Court	: Falls under the jurisdiction of Guwahati High Court. There is a bench at Mizoram.

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1.	Aizawl	3,576.31	3,39,812	Aizawl
2.	Lunglei	4,538.00	1,37,155	Lunglei
3.	Chhimtuipui	1,399.90	60,823	Saiha
4.	Lawngtlai	2,557.10	73,050	Lawngtlai
5.	Champhai	3,185.85	1,01,389	Champhai
6.	Kolasib	1,282.51	60,977	Kolasib
7.	Mamit	3,025.75	62,313	Mamit
8.	Serchhip	1,421.60	55,539	Serchhip



NAGALAND

Area	: 16,579 sq kms	Population	:	19,88,636
Capital	: Kohima	Principal Languages	:	Angami, Ao, Chang, Konyak, Lotha, Sangtam, Sema and Chakhesang.

HISTORY AND GEOGRAPHY

Nagaland, the 16th State of the Indian Union, was established on 1 December 1963. It is bound by Myanmar on the East, Arunachal on the North, Assam on the West and Manipur on the South. It lies between the parallels of 98 degree and 96 degree East Longitude and 26.6 degree and 27.4 degree latitude North of the Equator.

The State of Nagaland has an area of 16.579 sq kms with a population of 19,88,636 as per the 2001 census. The State is mostly mountainous except those areas bordering Assam valley. Mount Saramati is the highest peak in Nagaland with a height of 3,840 metres and its range forms a natural barrier between Nagaland and Myanmar.

The Naga people belong to the Indo-Mongoloid group of people living in the contiguous areas of the North Eastern hills of India and the upper portion of Western Myanmar. The major-recognised tribes of Nagaland are Angami, Ao, Chakhesang, Chang, Khiamniungan, Kuki, Konyak, Lotha, Phom, Pochury, Rengma, Sangtam, Sumi, Yimchungru and Zeliang. The Naga languages differ from tribe to tribe and sometimes even from one village to another. They are, however, under the Tibeto-Burma family.

In the 12th and 13th Centuries, gradual contacts with the Ahoms of present day Assam was established but this did not have any significant impact on the traditional Naga way of life. However, in the 19th Century the British appeared on the scene and ultimately the area was brought under British Administration. After Independence this territory was made a centrally administered area in 1957 administered by the Governor of Assam. It was known as the Naga Hills Tuensang Area. This failed to quell popular aspirations and unrest began. Hence, in 1961, the area was renamed as Nagaland and given the status of State of the Indian Union, which was formally inaugurated on 1 December 1963.

AGRICULTURE

Nagaland is basically a land of agriculture. About 70 per cent of the population depends on agriculture. The contribution of agricultural sector in the state is very significant. Rice is the staple food. It occupies about 70 per cent of the total area under cultivation and constitutes about 75 per cent of the total food production in the state.

The major land use pattern is slash and burn cultivation locally known as Jhum. Area under jhum cultivation and terraced cultivationis about 1,01,400 hectares. The total food production during the year was 3,86,300 MT.

Out of the total land area of 16,57,587 hectares, forest area occupies approximately 8,35,436. There are wild life sanctuaries and national parks, namely, Intanki and Puliebadze in Kohima District, Fakim in Tuensang and Rangapahar in Dimapur.

POWER

According to the 1981 census, Nagaland achieved cent per cent electrification in the rural areas. Nagaland has so far achieved 100 per cent village electrification reaching even the remotest village of the state.

IRRIGATION

There is no major or medium irrigation project so far constructed in the state. The irrigation works are mostly meant to divert small hill streamlets to irrigate valleys used for rice cultivation. The total area under irrigation covers 93,231.43 hectares.

TRANSPORT

Roads : The total length of roads in Nagaland in 9,860 km which includes national highway, state highways, district and village roads.

Railways/Aviation : Dimapur is the only place in the state from where air and train services are available.

FESTIVALS

Music and dances are an intrinsic part of Naga life. Folk songs and ballads eulogizing bravery, beauty, love, generosity, etc., are transmitted from generation to generation. Likewise dancing is an important part of every festive occasion. Feasting, singing, dancing and merrymaking invariably accompany festivals. Some of the important festivals are Sekrenyi, Moatsu, Tokhu Emong and Tuluni.

TOURISM

With the opening of the state to the international tourist by relaxation of Restricted Area Permit (RAP), a good number of foreign tourists as well as domestic tourists visit Nagaland every year.

The HORNBILL festival conceived by the Tourism Department and held in the first week of December is an annual event where all tribes of Nagaland come together to celebrate, exhibit and sell their traditional wares, foodstuffs and crafts. Three traditional festivals, namely Sekrenyi at Touphema in Kohima District (Feb 26-27), Monyu at Pongo in Longleng Sub-division (April 1-3) and Moatsu at Chuchuyimlang in Mokokchung district (May 1-3) have been identified as festival destinations.

INDUSTRIES

The process of industrialisation in the state is in its infancy, but the need to have more industries has been well recognized. Nagaland Mechanised Bricks Co. Ltd., in Dimapur with one lakh capacity of bricks per day has been commissioned. Handloom and Handicrafts are important cottage capacity industries, which are mainly being managed by cooperative societies. The Nagaland Handloom and Handicrafts Development Cooperation Ltd. in Dimapur is the state owned corporation, which is responsible for the promotion and marketing of handloom

and handicraft products in the state. An industrial growth centre at Ganeshnagar near Dimapur is ready for operation.

The Nagaland Industrial Development Corporation is the premier promotional organisation in providing guidance and capital assistance to entrepreneurs. The fruits and vegetables processing and cold storage plant at Dimapur has an installed capacity of processing 5 MT of fruits and vegetables per day and 3000 MT cold storage facility.

GOVERNMENT

Governor	: Shyamal Dutta	Chief Secretary	: Lal Huma
Chief Minister	: Neiphiu Rio	Jurisdiction of High Court	: Falls under Guwahati High Court. There is a bench at Kohima.

AREA, POPULATION AND DISTRICT HEADQUARTERS

S. No.	District	Area (sq km)	Population	Headquarters
1.	Kohima	3,144	3,14,366	Kohima
2.	Mokokchung	1,615	2,27,320	Mokokchung
3.	Mon	1,876	2,59,604	Mon
4.	Tuensang	4,228	4,14,801	Phek
5.	Zunheboto	1,255	1,54,909	Tuensang
6.	Wokha	1,628	1,61,098	Wokha
7.	Dimapur	927	3,08,382	Dimapur
8.	Phek	2,026	1,48,246	Phek



ORISSA

Area	: 1,55,707 sq km	Population	: 36,804,660
Capital	: Bhubaneswar	Principal Language	: Oriya

HISTORY AND GEOGRAPHY

Orissa, the land of Oriyas, was known as Kalinga in ancient days. In the third century BC (261 BC) Ashoka the Mauryan emperor, sent a powerful force to conquer Kalinga which offered stubborn resistance. Kalinga was subdued but the carnage which followed, struck Ashoka with remorse. After the death of Ashoka, Kalinga regained its independence. In the second century BC, it become a powerful country under Kharavela. With the death of Kharavela, Orissa passed into obscurity. In the fourth century AD, Samudragupta invaded Orissa which lay astride his path and overcame

resistance offered by five of its kings. In 610 AD, Orissa came under the sway of King Sasanka. After Sasank's death, Harsha conquered Orissa.

Orissa had its own rulers (Ganga dynasty) in the seventh century AD. In 795 AD, Mahasivagupta Yajati II came to the throne and with him began the most brilliant epoch in the history of Orissa. He united Kalinga, Kangoda, Utkal and Koshala in the imperial tradition of Kharavela. Under the kings of Ganga dynasty, Orissa continued to flourish. Narasingha Dev of this dynasty is reputed to have built the unique Sun Temple of Konark. From mid-16th Century, Orissa was ruled successively by five Muslim kings till 1592, when Akbar annexed it into the Mughal empire. With the decline of the Mughal empire, Marathas occupied Orissa. They continued to hold it till the British took over in 1803.

Orissa was made into a separate province on 1 April 1936. After Independence, princely states in and around Orissa surrendered their sovereignty to the Government of India. By the States Merger (Governor's provinces) Order, 1949 the princely states of Orissa were completely merged with the state of Orissa in January 1949. Although the state of Orissa had many ancient names like Kalinga, Utkal and Udra, it is widely known as the land of Lord Jagannath. Lord Jagannath is intimately connected with the social, cultural and religious life of Orissa. Jainism, Islam and Christianity have had considerable impact on the people of Orissa in different periods.

Orissa is situated in the north-eastern part of the Indian peninsula. It is bound by the Bay of Bengal on the east, West Bengal on the north-east, Jharkhand on the north, Chhattisgarh on the west and Andhra Pradesh on the south. The state may be broadly divided into four geographical regions-the northern plateau, central river basin, eastern hills and coastal plains.

AGRICULTURE

Agriculture is the mainstay of Orissa's economy and its provided employment directly or indirectly to around 65% of the total work force. Paddy is the principal food grain and its production during 2005-06 was 68.59 lakh MT. Besides this, Sugar Cane, Oil Seeds, Oil seeds, Fibres cultivations has been widely accepted by the Orissa's farmers.

IRRIGATION AND POWER

Irrigation is one of the key factors not only to stabilize agricultural production but also to encourage farmers to go for higher application of inputs and adoption of most modern technology to increase production. Irrigation potential has been created through major, medium, minor irrigation and water harvesting projects upto 27.31 lakh hectares by the end of year 2005-06. To drive more benefit and smooth management of irrigation potential Govt. of Orissa has implemented Pani Panchayat Yojana and Biju Krushak Bikas Yojana.

The total power generation is states sector during 2005-06 was 3095 MUs, out of 46,989 inhabited villages in the state 38,044 village have been electified till the end of March-2006.

INDUSTRY

The Industrial Promotion and Investment Corporation Limited (IPICOL), Industrial Development Corporation Limited (IDCOL) and Orissa State Electronics Development Corporation (OSEDC) are the three nodal agencies for promotion of large and medium industries in the State. To aecelerate the pace of Industrial

Development MoUs for investment of over 4 lakh crores signed with reputed national and international investors in steel, aluminium and alumina, petrochemical, I.T. and ITES, Thermal Power Generation and other sectors. the state is also providing institutional and financial support with various incentives and concessions for promotino of small-scale, village and cottage industries. By the end of 2005-2006, there were about 87,861 number of SSI units setup in the State with an investment of Rs. 2554.04 crore providing employment opportunities for 5.36 lakh persons.

TRANSPORT

Transport and communication is the basic infratructural requirement for achieving rapid economic development. The ongoing economic reforms, therefore, attach high priority to development of transport and communication infrastructure. During 2005-06 the total road length of the state comprising of 3,592 kms National Highway, 29 kms state express highway, 3887 kms state highway, 4277 kms of major district roads, 6,314 kms of other district roads, 27,462 kms rural roads, 20,314 kms panchayat samiti roads, 1,39,942 kms G.P. roads, 7,298 kms forest roads, 17,282 kms urban roads, 6,277 kms irrigation roads and 88 kms GRIDCO road.

Railways : The state had 2339 kms of railway route including 51 kms of narrow gange as on 31.3.2006. The railway routes pass through 23 districts out of 30 districts of the state.

Aviation : Ministry of Civil Aviation, Government of India have taken up expansion and modernisation of Bhubaneswar Air Port (Biju Patnaik Air Port) inview of its geographical, Tourist and Commercial importance. Flights available from Bhubanewswar to cities like Delhi, Kolkata, Chennai, Hyderabad, Bangalore and Mumbai. There are 13 air strips and 16 helipads in the State for landing the State Government aircrafts and helicopters.

Ports : Among the 11 major ports in the country, Paradeep ist he only port belonging to Orissa, through which mainly minerals and metalogical products are exported. Besides this, the State Government have development a Fair weather port the Gopalpur with an investment of Rs. 35.95 crore.

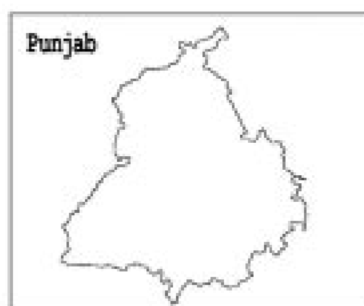
GOVERNMENT

Governor	: Muralidharan Chandrakanta Bhandare	Chief Secretary	: Shri Ajit Kumar Tripathy
Chief Minister	: Naveen Patnaik	Chief Justice	: Ashok Kumar Ganguly
Speaker	: Maheswar Mohanty	Jurisdiction of High Court	: Orissa

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1.	Angul	6,375	11,40,003	Angul
2.	Balasore	3,806	20,24,508	Balasore
3.	Bolangir	6,575	13,37,194	Bolangir
4.	Boudh	3,098	37,33,72	Boudh
5.	Bhadrak	2,505	13,33,749	Bhadrak
6.	Bargarh	5,837	13,46,336	Bargarh
7.	Cuttack	3,932	23,41,984	Cuttack

8.	Deogarh	2,940	2,74,108	Deogarh
9.	Ganjam	8,206	31,60,635	Chhatrapur
10.	Dhenkanal	4,452	10,66,878	Dhenkanal
11.	Gajapati	4,325	51,18,837	Parlakhemundi
12.	Jagatsinghpur	1,668	10,57,629	Jagatsinghpur
13.	Jajpur	2,899	16,24,341	Jajapur Town
14.	Jharsuguda	2,081	5,09,716	Jharsuguda
15.	Keonjhar	8,303	15,61,990	Keonjhar
16.	Kalahandi	7,920	13,35,494	Bhawanipatna
17.	Koraput	8,807	11,80,637	Koraput
18.	Kendrapara	2,644	13,02,005	Kendrapara
19.	Khurda	2,813	18,77,395	Khurda
20.	Mayurbhanja	10,418	22,23,456	Baripada
21.	Malkangiri	5,791	5,04,198	Malkangiri
22.	Nawarangpur	5,291	10,25,766	Nawarangpur
23.	Nayagarh	3,890	8,64,516	Nayagarh
24.	Nuapada	3,852	5,30,690	Nuapada
25.	Puri	3,479	15,02,682	Puri
26.	Kandhamal	8,021	6,48,201	Phulbani
27.	Rayagada	7,073	8,31,109	Rayagada
28.	Sambalpur	6,657	9,35,613	Sambalpur
29.	Sundargarh	9,712	18,30,673	Sundargarh
30.	Sonepur	2,337	5,41,835	Sonepur



PUNJAB

Area	: 50,362 sq km	Population	: 2,43,58,999
Capital	: Chandigarh	Principal Language	: Punjabi

HISTORY AND GEOGRAPHY

Ancient Punjab formed part of the vast Indo-Iranian region. In later years it saw the rise and fall of the Mauryas, Bactrians, Greeks, Sakas, Kushans and Guptas. Medieval Punjab saw a supremacy of the Muslims. Ghaznavi was followed by the Ghoris, the slaves, the Khiljis, the Tughlaks, the Lodhis and the Mughals. Fifteenth and sixteenth centuries marked a period of watershed in the history of Punjab. Through teachings of Guru Nanak, Bhakti movement received a great impetus. Sikhism began as a socio-religious movement, which was more interested in fighting evils in religion and society. It was Guru Gobind Singh, the tenth Guru, who transformed the Sikhs into the Khalsa. They rose to challenge tyranny and after centuries of servitude,

established a humane Punjabi Raj based on secularism and patriotism. Maharaja Ranjit Singh, in the words of a Persian writer, changed Punjab from Madam Kada to Bagh-Bahist (from the abode of sorrow to the garden of paradise). But soon after his death the entire edifice collapsed due to internal intrigues and British machinations. After two abortive Anglo-Sikh wars, Punjab was finally annexed to the British Empire in 1849.

The fight against the British rule had begun long before Mahatma Gandhi's arrival on the scene. The revolt found expression through the movement of a revivalist or reformist character. First, it was the Namdhari sect, which believed in self-discipline and self-rule. Later, it was Lala Lajpat Rai who played a leading role in the Freedom Movement. Punjab was in the vanguard of India's freedom struggle on all fronts in India and abroad. Punjab's hardships did not end with Independence. It had to face the misery of Partition with large-scale bloodshed and migration. Besides their rehabilitation, there was the task of reorganisation of the State.

Eight princely states of East Punjab were grouped together to form a single state called PEPSU—Patiala and the East Punjab States Union—with Patiala as its capital. PEPSU state was merged with Punjab in 1956. Later in 1966, Haryana was carved out of Punjab.

Situated in the north-western corner of the country, Punjab is bound on the west by Pakistan, on the north by Jammu and Kashmir, on the north-east by Himachal Pradesh and on the south by Haryana and Rajasthan.

AGRICULTURE

Punjab State with only 1.5 per cent geographical area of country produces 22 per cent of wheat, 12 per cent of Rice and 12 per cent of cotton in the country. The cropping intensity of Punjab State is more than 186 per cent which has earned a name of "Food basket of the country and granary of India." It has been pooling 40-50 per cent of rice and 50-70 per cent of wheat for the last two decades. In Punjab per hectare consumption of fertilizer is 177 kg as compared to 90 kg at national level. Also Punjab State has been awarded National Productivity Award for agriculture extension services for consecutively ten years from 1991-92 to 1998-99 and 2001 to 2003-04.

INDUSTRY

There are 2.04 lakh small-scale units in the State. These units produce bicycle parts, sewing machines, hand tools, machine tools, auto parts, electrical items, sports goods, surgical instruments, leather goods, hosiery, knitwear, nuts and bolts, textiles, sugar, vegetable oil, etc., giving employment to about 9.35 lakh persons. In large / medium sector there are 600 large / medium scale units. SAS Nagar, Mohali in the vicinity of Chandigarh has emerged as an attractive destination for IT and IT enabled industries. Under the Industrial Infrastructure Upgradation Scheme (IIUS), Government of India has sanctioned two projects namely Knitwear Cluster and Bicycle Parts Cluster at Ludhiana for implementation in Punjab. The primary objective of the scheme is to enhance International Competitiveness of the domestic industry by providing quality infrastructure through public / private participation in clusters / locations which have greater potential to become globally competitive.

IRRIGATION

Punjab being an agrarian state, a very high priority is being given to agricultural

Development. The water available in Punjab is much less as compared to the land potential. Therefore, to maximise production per unit of water resources, it is emphasised to utilise every drop of water available judiciously and carefully. Even Government of Punjab is taking up a number of projects for the diversification of crop. Due to better irrigation management, an additional 0.97 lakh hectare of area has been brought under cotton crop in various cotton growing districts of Punjab. The Geographical area of the State is 50.36 lakh hectares having a cultural area of 42.90 lakh hectares out of which 33.88 lakh hectares is commanded by a vast network of canal infrastructure having a length of 14,500 km of main and branch canals distributaries and minors.

Ranjit Sagar Dam is a multipurpose river valley project which has been constructed 8 km upstream of Madhopur Head Works. It comprises of 160 metre high earth core-cum gravel shell dam on river Ravi with a gross potential to the tune of 3.48 lakh hectares of land. Punjab Irrigation and Drainage Project Phase II with credit assistance from World Bank has been completed. Irrigation potential of the existing irrigation system has been improved by completing the lining of 1,092 km length of channels, lining of 33,000 kms of water courses and modernisation of 295 canal regulation structures have been completed under the World Bank Project. Rehabilitation of 1,260 km length of Channels and 53 km new Channels have also been completed with state funds. The number of projects for raising the capacity of 6 canal systems and raising the capacity of 3 canals of Bathinda Canal System amounting to Rs 18.83 crore have been completed.

Project for remodeling of UBDC System to utilise additional supplies available on completion of Ranjit Sagar Dam has been taken up under AIBP Scheme. A total length of 298 km of main / branch canals out of 364.10 km and 1507 km length of lined / unlined distributaries / minors out of 1,557.25 km length provided in the project has since been completed at a cost of Rs 140 crore. For early completion of on-going UBDC Project, the balance work was taken up on war footing for which the funds of Rs 20 crore were released by the State government. The bottleneck of feeding required discharges in Kasur Branch Lower and Sabraon Branch Canal Systems has removed by undertaking the remodeling of their parent channel, i.e., Kasur Branch Upper, thereby restoring adequate canal water supplies to the vast agricultural area of UBDC System.

It is proposed to convert Banur Canal System from non-perennial to perennial for which the Project costing Rs 38.08 crore is under sanction of NABARD. Similarly, the Project for sidelining Main Branch Canal costing Rs 39.55 crore is also under sanction of NABARD. Above all, a consolidated Project costing Rs 299.22 crore for increasing capacity of various channels of BML Canal System, Sirhind Canal System, Sirhind Feeder System, Bist Doab Canal System and Eastern Canal System has been proposed for funding by NABARD, under which an additional irrigation potential of 33,000 hectares besides providing better irrigation facilities and about 1,98,000 hectares is targeted, thereby giving boost to food grain production in the State.

The backward Kandi Area in Punjab has been developed by construction of 11 Low Dams irrigating area of 12000 hectares and completion of Kandi canal will irrigate an area of 19867 hectares bringing in green revolution to the area. 1615 deep tubewells for irrigation purposes and additional length of 3905 km water courses stand lined on the state. The impact water table in the southern part of state of Punjab has been reduced by construction of new drains and maintenance of existing

8000 kms of drain. Besides 1800 km of flood protection embankments and about 3800 river training works have also been completed. Installation of shallow tubewells along Sirhind Feeder in the most critical areas also helped arresting the seepage from the Canal. On the irrigation front about 60 per cent of the total irrigated land is served by private / government tubewells and remaining 40 per cent is irrigated through canals.

POWER

The construction of Bhakra Nangal Complex including Bhakra Dam, Bhakra Main line, Nangal Hydel Channel, Ganguwal and Kotla Power House, Harike Barrage, Sirhind Feeder, remodelling of Madhopur Headwork into barrage, etc., and Beas Dam at Pong have been some of the major Irrigation and Hydroelectric projects which have played a significant role in considerably enhancing the irrigation and power potential of the State. Madhopur Beas Link was constructed to transfer surplus water of Ravi to Beas. A similar Beas-Satluj Link Project envisages the utilisation of the Beas water for the production of electricity at slapper and then transferring this water to Gobind Sagar lake. The Mukerian and Anandpur Sahib Hydroelectric projects are two important irrigation and power projects.

Ranjit Sagar Dam is multipurpose River Valley Project, comprising a 160 metre high earth core-cum-gravel shell dam on river Ravi, with a gross storage capacity of a reservoir as 3,280 million cusecs. It provides additional irrigation potential to 3.48 lakh hectares of land. All the four units of Ranjit Sagar Dam (4 x 150 MW) have been commissioned successfully. Annual generation from this project shall be 2,100 MU's out of which 4.6 per cent of energy generated shall be supplied free of cost to Himachal Pradesh and 20 per cent energy generated shall be supplied to J&K at genuine cost. By the completion of this dam, water of all three rivers allocated to Punjab under Indus Water Treaty will be harnessed. About Rs 500 crore per annum has started accruing and this project is likely to cover its own cost by the next four or five years.

PEDA

Punjab Energy Development Agency (PEDA) has implemented a special programme of 2HP Solar Photovoltaic Water Pump Sets for irrigation purposes in the state with financial assistance of Rs 41.45 crore from the Ministry of Non-Conventional Energy Sources, Government of India. So far 1,700 of such solar water pump sets have been installed in the state share FY 2000-01. Another 700 of solar pumps sets are under execution. PEDA has also taken up the execution of eight Mini Hydel Projects with a total capacity 9.8 MW on canal falls as technology demonstration projects. Another 44 Micro Hydel Projects with a total capacity of 36 MW have been allocated to private sector on BOO basis.

PEDA has also commissioned 200 kwp Solar Photovoltaic Grid Interactive Power Plant at village Khatkar Kalan, Distt. Nawanshahar at a total cost of Rs 4.5 crore with 67 per cent grant from MNES Government of India. This project was dedicated to the nation on 23 March 2003 by Dr. A.P.J. Abdul Kalam, Hon'ble President of India. PEDA has also been sanctioned 1 MW Biomethanation cattle dung-based demonstration power project at Haebowal Dairy Complex (Ludhiana). The cost of this project is Rs 14 crore (approx). MNEX has provided 50 per cent grant for this project. This project was commissioned on 3 November 2004. The work of Sardar Swaran Singh National Institute of Renewable Energy on Jalandhar-Kapurthala Road with grant of Rs 38 crore from MNES, is also under execution.

TRANSPORT

Roads : Public Works Department Building and Roads branch has been responsible for assets of State Government in terms of roads, bridges and buildings.

The total network length is 50,506 km. Punjab Roads and Bridges Development Board was established as a statutory body in 1998 with the enactment of PRBDB Act (No. 22) of 1998 with the basic aim of mobilising additional resources for state roads.

Aviation : There are Four Civil Aviation Clubs at Ludhiana, Patiala, Amritsar and Jalandhar, one domestic airport at Chandigarh an International Airport at Rajasansi (Amritsar) and two aerodromes at Patiala and Sahnewal (Ludhiana).

FAIRS AND FESTIVALS

Besides festivals of Dussehra, Diwali, Holi, other important festivals / fairs / melas are Maghi Mela at Mukatsar, Rural Sports at Kila Raipur, Basant at Patiala, Hola Mohalla at Anandpur Sahib, Baisakhi at Talwandi Saboo, Urs at Rauza Sharif at Sirhind, Chappar Mela at Chappar, Skeikh Farid Agam Purb at Faridkot, Ram Tirath at Village Ram Tirath, Shaheedi Jor Mela at Sirhind, Harballah Sangeet Sammelan at Jalandhar and Baba Sodal at Jalandhar. In addition to above Fairs and Festivals three heritage festivals at Amritsar, Patiala, Kapurthala are also celebrated every year and are very popular among the tourists.

TOURISM

Punjab is recognised as the granary of India and also enjoys, a fairly high per capita income. However, the State has to infuse additional funds for ensuring balanced development. Tourism, international and domestic, offers the best prospects of helping the State both in the short and long term basis, earn substantial amount of revenue for meeting necessary requirements of the State.

It has to be recognised that tourism not only generates employment, it also upgrades human skills and the infrastructure created for tourism is used by all other sectors of the economy. Therefore, development of tourism must not be viewed in isolation and the State must adopt an integrated approach for its development. Since tourism is a composite sector, its development presupposes participation of different agencies and necessitates cooperation and coordination at different level. The State recognises that uncontrolled growth of tourism can damage not only our cultural heritage but also our social and cultural values. Therefore, the State would introduce suitable legislation for an orderly and regulated growth of tourism and promotion of culture of Punjab.

The State Government has announced new Tourism Policy to develop tourism as the major industry of Punjab by providing leadership and organisational and strategic direction, to improve the quality of tourism products, to develop places of tourist interest, to provide necessary facilities for all categories of tourist and pilgrims, to market Punjab Tourism products internationally and domestically so as to provide employment and for the economic, environment, social and cultural benefit of our citizens with the following objectives to achieve the desired results envisaged in the document.

The State has a large number of places of tourist interest some of which include Golden Temple, Durgiana Mandir, Jallianwala bagh in Amritsar, Takhat Sri Kesgarh Sahib and Khalsa Heritage Complex at Anandpur Sahib, Bhakra Dam, Qila Androon

and Moti Bagh Palace at Patiala, Wetland at Harike Pattan Sanghol for archeological importance and Chattbir Zoo, Mugh. Complex at Aam Khas Bagh and Rauza Sharif of Sheikh Ahmed at Graves of Afghan Rules, Sodal Temple at Jalandhar commemorative Maharishi Balmiki Heritage.

GOVERNMENT

Governor	: General (Retd.) S.F. Rodrigues	Chief Secretary	: K.R. Lakhanpal
Chief Minister	: Sardar Prakash Singh Badal	Jurisdiction of High Court	: Punjab, Haryana and Chandigarh

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population (P)	Headquarters
1.	Amritsar	5,075	30,96,077	Amritsar
2.	Bhatinda	3,377	11,83,295	Bathinda
3.	Faridkot	1,472	5,50,892	Faridkot
4.	Fatehgarh Sahib	1,180	5,38,041	Fathegarh Sahib
5.	Firozepur	5,865	17,46,107	Firozepur
6.	Gurdaspur	3,570	21,04,011	Gurdaspur
7.	Hoshiarpur	3,310	14,80,376	Hoshiarpur
8.	Jalandhar	2,658	19,62,700	Jalandhar
9.	Kapurthala	1,646	7,54,521	Kapurthala
10.	Ludhiana	3,744	30,32,831	Ludhiana
11.	Mansa	2,174	68,87,558	Mansa
12.	Moga	1,672	8,94,854	Moga
13.	Muktsar	2,596	7,77,493	Muktsar
14.	Nawan Shehar	1,258	5,87,468	Nawan Shehar
15.	Patiala	3,627	18,44,934	Patiala
16.	Roop Nagar	2,117	11,16,108	Roop Nagar
17.	Sangrur	5,021	20,00,173	Sangrur



RAJASTHAN

Area	:	3,42,239 sq km	Population	:	5,64,73,122
Capital	:	Jaipur	Principal Languages	:	Hindi and Rajasthani

HISTORY AND GEOGRAPHY

Rajasthan, the largest State in India area-wise prior to Independence was known as Rajputana. The Rajputs, a martial community ruled over this area for centuries.

The history of Rajasthan dates back to the pre-historic times. Around 3,000 and 1,000 BC, it had a culture akin to that of the Indus Valley civilisation. The Chauhans who dominated Rajput affairs from seventh century and by 12^{th} century they had become an imperial power. After the Chauhans, it were the Guhilots of Mewar who controlled the destiny of the warring tribes. Besides Mewar, the other historically prominent states were Marwar,Jaipur,Bundi,Kota,Bharatpur and Alwar. Other states were only offshoots of these. All these states accepted the British Treaty of Subordinate Alliance in 1818 protecting the interest of the princes. This naturally left the people discontented.

After the revolt of 1857, the people united themselves under the leadership of Mahatma Gandhi to contribute to the freedom movement. With the introduction of provincial autonomy in 1935 in British India, an agitation for civil liberties and political rights became stronger in Rajasthan. The process of uniting scattered states commenced from 1948 to 1956 when the States Reorganisation Act was promulgated. First came Matsya Union (1948) consisting of a fraction of states, then, slowly and gradually other states merged with this Union. By 1949, Major states like Bikaner, Jaipur, Jodhpur and Jaisalmer joined this Union making it the United State of Greater Rajasthan. Ultimately in 1958, the present State of Rajasthan formally came into being, with Ajmer state, the Abu Road Taluka and Sunel Tappa joining it.

The entire western flank of the state borders with Pakistan, while Punjab, Haryana, Uttar Pradesh and Madhya Pradesh bound Rajasthan in north-east, south–east and Gujarat in south-west.

AGRICULTURE

Total cultivable area in the State is 216.99 lakh hectares (2006-2007). The estimated food grain production is 108.26 lakh tonnes. Principal crops cultivated in the State are rice, barley, jowar, millet, maize ,gram, wheat, oilseeds, pulses, cotton and tobacco. Cultivation of vegetable and citrus fruits such as orange and malta has also picked up over last few years. Other crops are red chillies, mustard, cumin seeds, fenugreek methi and asofoetida hing.

INDUSTRY AND MINERALS

Endowed with a rich culture, Rajasthan is also rich in minerals and is fast emerging on the industrial scenario of the country. Some of the important Central undertakings are Zinc Smelter Plant at Devari (Udaipur), Copper Plant at Khetri Nagar (Jhunjhunu) and Precision Instrument Factory at Kota. Small-scale industrial units numbering 275400 with a capital investment of Rs 4366.70 crore provides employment potential to about 10.55 lakh persons in the States as on March 2006. Major industries are textiles and woollens, sugar, cement, glass, sodium plants, oxygen, vegetable dyes, pesticides, zinc, fertilizers, railway wagons, ball bearings, water and electricity metres, sulphuric acid, television sets, synthetic yarn and insulting bricks. Besides, precious and semi-precious stones, caustic soda, calcium carbide, nylon and tyers, etc. are other important industrial units.

Rajasthan has rich deposits of zinc concentrates, emerald, granite, gypsum, silver ore, asbestos, felspar and mica. Promotional Industrial Park of the country has been established and made operational at Sitapura (Jaipur).

IRRIGATION AND POWER

By the end of March 2007 irrigation potential of 34.85 lakh hectares was created in the state through various major, medium and minor irrigation projects started 2006-07 and additional irrigation potential of 67,013 hectares (excluding IGNP & CAD) had been created upto March 2007. The install power capacity in the State has become 5647Mw upto March 2006 of which 3545.30 Mw is produced from State- owned projects, 473 Mw from collaboration projects and 1628.68 Mw from the allocation from Central power generating stations.

TRANSPORT

Roads : The total length of roads was 1,66,970 km as on March 2006.

Railways : Jodhpur, Jaipur, Bikaner, Kota, Sawai Madhopur and Bharatpur are main rail junctions of State.

Aviation : Regular air services connect Jaipur, Jodhpur and Udaipur with Delhi and Mumbai.

FESTIVALS

Rajasthan is a land of festivals and fairs, besides the national festivals of Holi, Deepawali, Vijayadashmi, Christmas, etc., birth anniversaries of gods and goddesses, saintly figures, folk heroes and heroines are celebrated. Important fairs are Teej, Gangaur(Jaipur),annual Urs of Ajmer Sharif and Galiakot, tribal Kumbh of Beneshwar(Dungarpur), Mahaveer fair at Shrimahavirji in Sawai Madhopur, Ramdeora(Jaisalmer),Janbheslwari fair(Mukam-Bikaner), Kartik Poornima and Cattle Fair (Pushkar-Ajmer) and Shyamji Fair(Sikar), etc.

TOURISTS CENTRES

Jaipur, Jodhpur,Udaipur, Bikaner, Mount Abu, Sariska Tiger Sanctuary in Alwar, Keoladeo National Park at Bharatpur, Ajmer, Jaisalmer, Pali and Chittorgarh are important places of tourist interest in the State.

GOVERNMENT

Governor	:	Shilendra Kumar Singh	Chief Secretary	:	D.C. Samant
Chief Minister	:	Vasundhara Raje	Chief Justice		Justice Rajesh Balia
Speaker	:	Sumitra Singh	Jurisdiction of High Court	:	Rajasthan

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1.	Ajmer	8,481	21,80,526	Ajmer
2.	Alwar	8,380	29,90,862	Alwar
3.	Banswara	5,037	15,00,420	Banswara
4.	Barmer	28,387	19,63,758	Barmer
5.	Bharatpur	5,066	20,98,323	Bharatpur
6.	Bhilwara	10,455	20,09,516	Bhilwara
7.	Bikaner	27,244	16,73,562	Bikaner
8.	Bundi	5,550	9,61,269	Bundi
9.	Chittorgarh	10,856	18,02,656	Chittorgarh
10.	Churu	16,830	19,22,908	Churu
11.	Dholpur	3,034	9,82,815	Dholpur
12.	Dungarpur	3,770	11,07,037	Dungarpur
13.	Ganganagar	7,944	17,88,487	Ganganagar
14.	Jaipur	11,588	52,52,388	Jaipur
15.	Jaisalmer	38,401	5,07,999	Jaisalmer
16.	Jalore	10,640	14,48,486	Jalore
17.	Jhalawar	6,219	11,80,342	Jhalawar
18.	Jhunjhunu	5,928	19,13,099	Jhunjhunu
19.	Jodhpur	22,850	28,80,777	Jodhpur
20.	Kota	5,481	15,68,580	Kota
21.	Nagaur	17,718	27,73,894	Nagaur
22.	Pali	12,387	18,19,201	Pali
23.	Sawai Madhopur	5,043	11,16,031	Sawai Madhopur
24.	Sikar	7,732	22,87,229	Sikar
25.	Sirohi	5,136	8,50,756	Sirohi
26.	Tonk	7,194	12,11,343	Tonk
27.	Udaipur	12,511	26,32,210	Udaipur
28.	Dausa	2,950	13,16,790	Dausa
29.	Baran	6,955	10,22,568	Baran
30.	Rajsamand	4,768	9,86,269	Rajsamand
31.	Hanumangarh	12,690	15,17,390	Hanumangarh
32.	Karoli	5,014	12,05,613	Karoli



SIKKIM

Area : 7,096 sq km	Population : 5,40,493 (2001 census)
Capital : Gangtok	Principal Languages : Lepcha, Bhutia and Nepali

HISTORY AND GEOGRAPHY

The early history of Sikkim starts in the 13th century with the signing of a blood-brotherhood treaty between the Lepcha Chief Thekong Tek and Tibetan prince Khye-Bumsa at Kabi Lungtsok in North Sikkim. This follows the historical visit of three revered Lamas to Yuksam in 1641 in West Sikkim where they consecrated Phuntsog Namgyal, a sixth generation descendent of Khye-Humsa as the first Chogyal of Sikkim, thus heralding the beginning of the Namgyal dynasty in Sikkim. With the march of history, events in Sikkim saw the State pass through the process of democratisation and become an integral part of the Indian Union in 1975. Guru Padmasambhava blessed Sikkim enroute to Tibet. Sikkim is a blessed land where people from all communities live in harmony. Inspite of the fact that Sikkim comprises different people and multi ehtnic society, it is perhaps the most peaceful State of the Indian Union to promote communal harmony and human relations, a feat which is much expected in a plural society like India.

Sikkim is a small hilly state, bound by vast stretches of Tibetan Plateaux in the North, the Chumbi Valley of Tibet and the Kingdom of Bhutan in the East, the Kingdom of Nepal in the West and Darjeeling (West Bengal) in the South. The State has a total area of 7,096 sq km and is stretched over 112 km from North to South and 64 km from East to West. It lies in the North-Eastern Himalayas between 27 degree 00’46’’ to 28 degree 07’48” North Latitude and 88 degree 00’58’’ to 88 degree 55’25” East Longitude.

The world’s third highest mountain, Khangchendzonga, regarded as the guardian deity of Sikkim, dominates the tiny Himalayan State with its awe-inspiring beauty and majesty. Sikkim is one of the 18 biodiversity hotspots in the world. The Sikkim Himalayas show tremendous biological diversity. More than 5000 species of angiosperms are found in the State, nearly one third of the total species of angiosperm found in the country. There are 4000 species of flowering plants, 300 species of ferns and allies, 450 to 500 species of orchids, 36 species of Rhododendrons, 40 species of oak, 30 to 40 species of primulas and bamboos, 144 species of mammals, 500 to 600 species of birds, over 400 species of butterflies and moths and many species of reptiles in the State. Rare blue sheep, tibetan mastiff, yaks and red pandas are found here.

TOURISM

Sikkim is famous for its lush green vegetation, forest, scenic valleys and majestic

mountains and a range of rich and magnificent cultural heritage and peace loving people who provide a safe haven for tourists. The State Government supports eco-friendly and pilgrimage tourism and accordingly have provided facilities to enable visitors to enjoy a first-hand experience of the rich heritage and lifestyle of Sikkim. Recognising the potential of adventure tourism, the state government is setting up a Himalayan Centre for Adventure Tourism at Chemchey Village in South Sikkim. Surajkund Mela in 2002, which had Sikkim as the theme, aroused interest on Sikkimese craft, folk arts, and heritage.

The premier monastery of Sikkim is Pemayantshe in Pelling. Apart from this there is Tashiding Monastery in West Sikkim, which is considered the holiest of all the monasteries in Sikkim. The most ancient monastery of Sikkim is in Yuksom, called the Drubdi monastery. It was the personal hermitage of Lhatsun Chenpo (Patron Saint of Sikkim), and was possibly built in 1700 AD. Some of the other monasteries are Phodong, Phensang, Rumtek, Ngadak, Tolung, Ahlay, Tsuklakhang, Ralong, Lachen, Enchey and others. Of the Hindu temples, the best known is the Thakurbari, in the heart of Gangtok. Then there is a holy cave in South district, which has a Shiva Lingam that irradiates the cave where no other light finds its way. There are some important Gurdwaras and Mosques, cheif among them being in Gangtok and Ravangla.

FESTIVALS

Sikkim's population comprises the three principal ethnic communities of the Bhutias, Lepchas and the Nepalese. Maghey Sankranti, Durga Puja, Laxmi Puja and Chaite Dassai / Ram Navami Dassai, Tyohar, Sonam Losoong, Namsoog, Tendong Lho Rum Faat (Worship of Mt. Tendong), Losar (Tibetan New Year) are the major festivals. The other festivals include Sakewa (Rai), Sonam Lochar (Gurung), Barahimzong (Mangar), etc.

AGRICULTURE

The State's economy is basically agrarian. More than 64 per cent of the population depends on agriculture for their livelihood. Agricultural land in Sikkim is estimated to be around 1,09,000 hectares, i.e., 15.36 per cent of the total geographical area. Farmers commonly follow mixed farming, which is ideally suited and fits well in the developmental process of making Sikkim an organic State. The State Government has drawn up plans to promote organic farming in Sikkim and seeks further value addition in its agricultural and horticultural produces. Maize, rice, wheat, potato, large cardamom, ginger and orange are the principal crops. Sikkim has the largest area and highest production of large brown cardamom in India. Ginger, potato, organge and off-season vegetables are other cash crops.

As per the Human Development Report-2001, land resources in Sikkim are constrained on account of demographic pressure (per capita availability) and activities that they can sustain. Diversification in the pattern of land use has to take into account both food security requirements and constraints imposed by the terrain. The limitations of terrace farming in terms of productivity, irrigation and the scope for extending cultivation highlight the constraints faced by those farming for livelihood security. Under these conditions innovative practices in land management and horticulture and floriculture can be identified as growth sectors.

INDUSTRY

Though Sikkim has been declared an industrially backward state, the existence of

craftsmanship based traditional Sikkimese cottage industries dates back to several centuries. Lepcha's skill in bamboo-craft, woodwork, spinning of yarn and carpet weaving in traditional textures, Bhutia's excellence in ancient Tibetan practice of carpet and rug weaving and Nepali's celebrated craftsmanship of their metalwork, silverware and woodwork are very exclusive. The Department of Commerce and Industries lays emphasis on the promotion and development of various small-scale industries. New Industrial Policy, which was extended in the year 2003, provides special package for development of industries in the state on the lines of northeast industries policy. This includes excise and income tax exemption to all new industries as well as expansion of existing units for a period of ten years from the date of commencement of commercial production. In addition, the policy also entails granting of financial concessions to 12 identified thrust areas in industries irrespective of where they are located in the state. The Government of Sikkim had organised two workshops at Delhi in 2003 to open up Sikkim as an investment destination and industrial growth.

Sikkim Jewels limited is one of the sophisticated and precision oriented industries for the manufacture of jewel bearings for electric meters, water meters and other measuring instruments like watches and clocks. Ten ancillary units have been set up to manufacture watch jewels. The Sikkim Industrial Development and Investment Corporation Ltd., (SIDICO) was set up as the state level principal financial institution engaged in the promotion and financing of development in this sector. It provides long-term loans for cottage, tiny, small and medium scale industrial units, hotels, hospitals, nursing homes and taxis.

IRRIGATION AND POWER

Tenth Five Year Plan targets to irrigate 34,118 hectares of agricultural land. Many new irrigation schemes for providing assured water both for Kharif and Rabi cropping have been taken up and to prevent damages to open channels owing to landslides and to ensure regular flow of water, concrete hume pipes and HDPE pipes are used extensively in problem areas.

Total installed capacity of power in the State is 36 MW that is hydro based with transformation capacity of 123 MVA. Rangeet hydel project has installed capacity of 560 MW. The total power potential of the state is estimated at 8,000 MW. Though only 0.2 per cent capacity was installed by the year 2001, four hydro projects with the total of 804 MW power are nearing completion in the state. More initiatives are being taken by the government to tap the full potential of the power in the state. The State is also open to private investment in power sector. The Teesta Valley Project now under construction is a run of the river scheme located in the East District and the proposed installed capacity of this project is 510 MW.

TRANSPORT

Roads : Gangtok is connected by roads with Darjeeling, Kalimpong, Siliguri and also with all the district headquarters within Sikkim. The total road length of the state is 2,383 kms including 41 kms of National Highway.

Railways and Aviation : The closest railway stations are Siliguri (113) and New Jalpaiguri (125 km) connecting Koklata, Delhi, Guwahati, Lucknow and other important cities. There is no airport in Sikkim though its foundation stone was laid by the then Vice President of India Kishan Kant in the year 2002 to construct an air strip near Pakyong, East Sikkim which is around 32 km from Gangtok. There is a

helicopter service between Gangtok and Bagdogra heavily subsidised by the State Government. The State has also initiated construction of number of helipads to connect the district and sub-divisional headquarters and important tourist places.

INFORMATION TECHNOLOGY

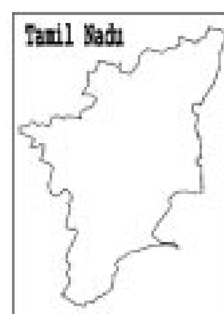
A new Information Technology Department has been created in the state and has prepared extensive projects to give top priority to this department. The newly created department has already launched a number of web sites on Sikkim and is now aiming for e-governance through the use of information tools. The official website of Sikkim hosted and maintained by the Department of Information Technology, Government of Sikkim is www.sikkimgovt.org.

GOVERNMENT

Governor	: Sudarshan Aggarwal	Chief Secretary	: N.D. Chingapa
Chief Minister	: Pawan Chamling	Chief Justice	: Ajay Nath Raj
Speaker	: D.N. Takarpa	Jurisdiction of High Court	: Sikkim

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1.	East	954	1,78,452	Gangtok
2.	North	4,226	31,240	Mangan
3.	South	750	98,604	Namchi
4.	West	1,166	98,161	Gyalshing



TAMIL NADU

Area	: 1,30,058 sq km	Population	: 6,24,05,679
Capital	: Chennai	Principal Language	: Tamil

HISTORY AND GEOGRAPHY

Tamil Nadu has a hoary antiquity. Though early sangam classics throw historical references it is only from the Pallavas we pass to recorded history.

South India had remained under the hegemony of the Cholas, the Cheras and the Pandyas for centuries. The Pallavas held supremacy from about the second quarter of the fourth century AD. They were the originators of the famous Dravidian style of temple architecture. The last Pallava ruler was Aparajita in whose reign the

later Cholas under Vijayalaya and Aditya asserted themselves by about the 10th century. At the end of the 11th century, Tamil Nadu was ruled by several dynasties like the Chalukyas, Cholas and Pandyas. In the two centuries that followed, the imperial Cholas gained paramountacy over South India.

Muslims gradually strengthened their position, which led to the establishment of the Bahamani Sultanate, by the middle of the 14th century. At the same time, the Vijayanagar Kingdom quickly consolidated itself and extended its sway over the whole of South India and at the close of the century, Vijayanagar became the supreme power in South. However, it crumbled at the battle of Talikota in 1564 to the confederate forces of the Deccan Sultans.

Even during the period of the tumultous confusion that followed the battle of Talikota, European commercial interest had appeared as rivals in the area of South India. The Portuguese, the Dutch, the French and the English came in quick succession and established trading centres known as 'Factories'. East India Company which had established their factory at Masulipatnam, now in Andhra Pradesh, in 1611 gradually annexed territories by encouraging enmity among the native rulers. Tamil Nadu was one of the first of British settlements in India. The State is the successor to the old Madras Presidency which in 1901 covered the bulk of the southern peninsula. The composite Madras State was later reorganised and the present Tamil Nadu was formed.

Tamil Nadu is bounded on north by Andhra Pradesh and Karnataka on west by Kerala, on east by the Bay of Bengal and on south by the Indian Ocean.

AGRICULTURE

Agriculture is the major occupation in Tamil Nadu. The total cultivated area in the State was 5.88 million ha in 2004-05. The principal food crops include paddy, millets and pulses. Commercial crops include sugarcane, cotton, sunflower, coconut, cashew, chillies, gingelly and groundnut. Plantation crops are tea, coffee, cardamom and rubber. Major forest produces are timber, sandalwood, pulp wood and fuel wood. Tamil Nadu occupies a premier position in the production and extensive application of bio-fertilizers. Efforts are on to improve farming technologies so as to increase yields in the low rainfall areas of the State. Annual foodgrains production in the year 2004-05 was 6.146mt. In later years, the foodgrain production exceeded ten million tonnes with rice contributing an average eight million tonnes.

INDUSTRY AND MINERALS

Major Industries in the State are cotton, heavy commercial vehicles, auto components, railway coaches, power pumps, leather tanning industries, cement, sugar, paper, automobiles and safety matches.

Knowledge based industries like I.T. and Biotechnology have become the thrust area in the industrial scene in Tamil Nadu. TIDEL, a software technology park, has been established in Tharamani, Chennai. Chennai has currently about 50,000 software professionals employed in 900 IT companies.

Global auto majors Hyundai Motors, Ford, Hindustan Motors and Mitsubishi have commenced production plants. Ashok Leyland and TAFE have set up expansion plants in Chennai.

Main mineral wealth of the state is granite, lignite and limestone. The state is an important exporter of tanned skin and leather goods, yarn, tea, coffee, spices,

engineering goods, tobacco, handicrafts and black granite. Tamil Nadu contributes to 60 per cent of the tannery industry in India.

IRRIGATION

Important irrigation schemes and modernisation of existing Periyar Vaigai System, Palar Basin System and Parambikulam-Aliyar System besides the minor system in Vellar, Pennayar, Araniyar Amaravathi, Chithar basins totalling, an extent of six lakh acres of existing ayacut in Tamil Nadu have been benefited by implementing the 'System Improvement and Farmers Turnover Projects' executed with assistance from World Bank. The World Bank has also approved Rs 2547 crores for the Irrigated Agriculture Modernisation and Water Bodies Restoration Management Project. The Project covers about 6,17000 ha. in 63 selected sub-basens throughout the state. Nine irrigation projects which were just started and going on a slow progress have been speeded up with adequate fund and guidance for early completion. The major irrigation system covering one-third of irrigated extent in Tamil Nadu, namely tank irrigation system has been given due regard for development under WRCP and 620 tanks maintained by Public Works Department falling under Palar, Vaigai and Tamaraparani Basins have been taken up for rehabilitation and improvement. This project is nearing completion to the maximum satisfaction of the farmers. This State has become the pioneer State to implement the system of 'River basin management' by an individual body consisting of officials and farmers besides various representatives of the basin.

POWER

The total installed capacity for electricity in the State is 10,083 MW. The installed capacity of State Sector is 5,550 MW and that of Private Sector is 1,154 MW. Apart from this 2841 MW is available as share from Central Sector, 360MW is obtained from external assistance and 178 MW from Captive Power Plants. Apart from this wind mills from the private sector provide 2969 MW and the T.N.E.B. wind mills provide 19 MW.. The demand of 8,890 MW is expected at the end of the Tenth Plan.

As on 31.03.2006, there are 1100 sub stations, 1.49 lakh kms of Extra High Tension / High Tension lines, 4.87 lakh kms of low tension lines, 1.67 distribution transformers and 178.03 lakh service connections.

TRANSPORT

Roads : The length of roads network in Tamil Nadu is 1,50,095 km of which surfaced road is 60,901 km.

Railways : The total length of railways is 4,181 km and the main junctions being Chennai, Madurai, Tiruchirapalli, Coimbatore and Tirunelveli.

Aviation : Chennai being the international airport in the southern region, is the main centre of airline routes. Besides, there are airports at Tiruchirapalli, Madurai, Coimbatore and Salem.

Ports : Major ports in the State are Chennai, Egmore and Tuticorin. There are seven other minor ports including Cuddalore and Nagapattinam.

FESTIVALS

Pongal is the harvest festival celebrated by the farmers in January to worship the sun, the earth and the cattle as thanks giving for a bounteous harvest. Pongal is followed by the Jallikattu-Bull fight, Tamil Nadu style in some parts of sourthern

Tamil Nadu. Alanganallur in Tamil Nadu is internationally famous for Jallikattu-Bull fight. Chithirai festival, Madurai: Madurai brings a spectacular re-enactment of the marriage of the Pandiyan princess Meenakshi to Lord Sundareswarar. Adipperukku is a festival celebrated on the 18th day of Tamil month, Adi, on the banks of rivers. It marks the commencement of new farming operations. A truly secular festival - where devotees flock to the shrine of saint Quadirwali. One of the descendants of the Saint is chosen as a Peer or spiritual leader and is honoured with offerings. On the tenth day of the festival, the Saint's tomb is annointed with sandalwood and later the holy sandal paste is distributed to everyone. Velankanni Festival : Wondrous legends surround the church, the most famous being that of the ship wrecked Portuguese sailors, who in the 16th century, vowed to build a great shrine for the Virgin Mary, for saving their lives in a terrible storm. The Velankanni festival attracts thousands, clad in orange robes to the sacred spot where the ship landed. Equally famous are the Virgin Mary's miraculous healing powers - earning for the church the name 'Lourdes of the East'. Navarathiri Festival : Literally, this means the festival of 'nine nights' taking unique and different forms in different states of India - all to propitiate the goddess Sakthi, for power, wealth and knowledge. Music Festival : In December Chennai celebrates her priceless heritage of carnatic music and dance to present a galaxy of star artistes, old and new.

TOURIST CENTRES

Chennai, Mamallapuram, Poompuhar, Kancheepuram, Kumbakonam, Dharasuram, Chidambaram, Tiruvannamalai, Srirangam, Madurai, Rameswaram, Tirunelveli, Kanniyakumari, Thanjavur, Velankanni, Nagoor, Chithannavasal, Kazhugumalai (monument centres), Courtallam, Hogenakkal, Papanasam, Suruli (water-falls), Ooty (Udhagamandalam), Kodaikanal, Yercaud, Elagiri Kolli Hills (hill stations), Guindy (Chennai), Mudumalai, Annamalai, Mundanthurai, Kalakad (wild life sanctuaries), Vedanthangal and Point Calimere (bird sanctuaries), Arignar Anna Zoological Park, near Chennai, are some of the places of tourist interest.

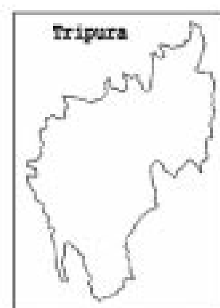
GOVERNMENT

Governor	: S.S. Barnala	Chief Secretary	: L. Tripathy
Chief Minister	: M. Karunanidhi	Jurisdiction of High Court	: Tamil Nadu and Pondicherry

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1.	Chennai	174	43,43,645	Chennai
2.	Kancheepuram	4,307	28,77,468	Kancheepuram
3.	Thiruvallur	3,550	27,54,756	Thiruvallur
4.	Vellore	6,077	34,77,317	Vellore
5.	Thiruvannamalai	6,190	21,86,125	Thiruvannamalai
6.	Cuddalore	3,706	22,85,395	Cuddalore
7.	Villupuram	7,190	29,60,373	Villupuram
8.	Salem	5,425	30,16,346	Salem
9.	Namakkal	3,404	14,93,462	Namakkal
10.	Dharmapuri	9,622	28,56,300	Dharmapuri

11.	Pudukottai	4,651	14,59,601	Pudukottai
12.	Erode	8,209	25,81,500	Erode
13.	The Nilgiris	2,549	7,62,141	Udhagamandalam
14.	Coimbatore	7,469	42,71,856	Coimbatore
15.	Tiruchirappalli	4,511	24,18,366	Tiruchirappalli
16.	Karur	2,901	9,35,686	Karur
17.	Perambalur	1,750	4,93,646	Perambalur
18.	Ariyalur	1,944	6,95,524	Ariyalur
19.	Thanjavur	3,476	22,16,138	Thanjavur
20.	Nagapattinam	2,417	14,88,839	Nagapattinam
21.	Thiruvarur	2,377	11,69,474	Thiruvarur
22.	Madurai	3,696	25,78,201	Madurai
23.	Theni	2,869	10,93,950	Theni
24.	Dindigul	6,058	19,23,014	Dindigul
25.	Ramanathapuram	4,175	11,87,604	Ramanathapuram
26.	Sivagangai	4,143	11,55,356	Sivagangai
27.	Virudhunagar	4,283	17,51,301	Virudhunagar
28.	Tirunelveli	6,810	27,23,988	Tirunelveli
29.	Thoothukudi	4,621	15,72,273	Thoothukudi
30.	Kanniyakumari	1,684	16,76,034	Nagercoil



TRIPURA

Area	:	10,491.69 sq km	Population	:	31,99,203
Capital	:	Agartala	Principal Languages	:	Bengali and Kokborak

HISTORY AND GEOGRAPHY

Tripura has its unique tribal culture and a fascinating folklore. The history of Tripura can be learnt from 'Rajmala' chronicles of king Tripura and writings of historians. There are references of Tripura even in the Mahabharata and the Puranas. According to 'Rajmala', the rulers were known by the surname 'Fa' meaning 'father'. There is a reference to rulers of Bengal helping Tripura kings in the 14th century. Kings of Tripura had to face frequent Mughal invasions with varying successes. They defeated the Sultans of Bengal in several battles. Nineteenth century marked the beginning

of the modern era in Tripura when king Maharaja Bir Chandra Kishore Manikya Bahadur modelled his administrative set-up on the British India pattern and brought in various reforms. His successors ruled Tripura till 15 October 1949 when the state merged with the Indian Union. Initially, a part 'C' state, it became a centrally administered territory with the re-organisation of states in 1956. In 1972, Tripura attained the status of a full-fledged state.

Tripura is strategically situated between the river valleys of Myanmar and Bangladesh. Encircled almost on three sides by Bangladesh, it is linked with Assam and Mizoram in the North-East.

IRRIGATION AND POWER

Geographical area of Tripura is 10,49,169 hectare. It is assessed that about 2,80,000 hectares of land is cultivable. Till 31 March 2007 an area of 82,005 hectares of land has been brought under assured irrigation by providing lift irrigation, deep tube well, diversion, medium irrigation, shallow tube wells and pump sets. This is about 32.45 per cent of the cultivable land in the state. 1381 L.I. schemes, 165 deep tube wells, 29 diversion schemes have been completed and 3 medium irrigation schemes, namely, (i) Gumti (ii) Khowai and (iii) Manu are providing irrigation water to the part portion of the command areas as canal system is expected to be completed 2009-10.

The present peak demand of power in the State is around 162 MW. Power available now from own generating stations is around 70 MW. About 50 MW power is being imported from the State's allocated share from the Central Sector power generating stations in the NE-Region. Thus, the total available power is about 120 MW, leaving a shortfall of about 42 MW during peak hours. This deficit is currently being managed by shedding load in a sequential manner for about 1(one) to 1/1-2 (one and half) hour in the evening throughout the State.

The peak demand of the State has been estimated to go up to 253 MW by 2007 by CEA in 16th Power Survey Report. It is estimated that the peak demand during 2012 wil be 396 MW considering the demand arising out of Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY) and industralisation in the State.

1x21 MW GT Project at Baramura finding under NEC : Sanctioned by EFC & recommended by DONER but yet to be approved by Ministry of Finance, Government of India.

Another 1x21 MW G.T. set at Rokhia, West Tripura was installed on 31 March 2006.

ONGCL Power Project (110 MW): Tripura's share is 100 MW. Likely to be commissioned in 2008-09.

TRANSPORT

Roads : The total length of roads in Tripura is 15,551 km of which major district roads constitute 90 km. Other district roads are 1,274 km and State Highway is 545 km.

Railways : The total length of ralway lines within the state extended upto Manu is 66 km. Manu-Agartala Railway line (Length-88 km) has been declared as National Project and target date has been fixed for completion of the project by December 2007.

Preliminary survey for Agartala-Sabroom rail link was done several years back. Reconnaissance engineering-cum-traffic survey for a new BG line between Agartala and Sabroom was sanctioned in 1998-99. The survey report for this new Railway line (110 km) was finalised and sent to the Railway Board in mid-2000 by NF railway authorities. Therefore, work for updating of this survey report was taken up during 2004-05 and updated survey report with cost estimate of Rs. 556.88 crore was sent to the Railway Board by NF railway authorities in early 2005.

In order to increase trade and commerce with Bangladesh, railway link between Agartala (a railway junction in Bangladesh) needs to be established. The distance from Agartala is roughly 13 km of which 5.40 km is within India. This link will facilitate establishing a much-needed direct railway link from Tripura to Kolkata in West Bengal for easier movement of passenger and freight.

Aviation : The main Airport is at Agartala. There are airports at Kailashahar, Kamalpur and Khowai though they are not functioning at present.

The Civil Aviation Ministry has been requested to consider asking Indian Airlines and other private airlines operating in this region to operate hopping flights between Agartala and Silchar in Assam via Kailashahar and Kamalpur airport. The Ministry has now mooted the idea that the State government and NEC may sign a MoU with NEC agreeing to share the expenditure on development of these two airports. The State Government has expressed its inability to agree to this proposal.

TOURISM

The important tourist centres are :

(a) West-south Tripura Tourism Circuit: (i) Agartala (ii) Kamalsagar (iii) Sepahijala (iv) Neermahal (v) Udaipur (vi) Pilak (vii) Mahamuni

(b) West-North Tripura Tourism Circuit: (i) Agartala (ii) Unokuti (iii) Jampui Hill.

FESTIVALS

a) Tourism Festival: (i) Tourism Festival at Vanghmun, (ii) Unokuti Tourism Festival, (iii) Neermahal Tourism Festival, (iv) Pilak Tourism Festival.

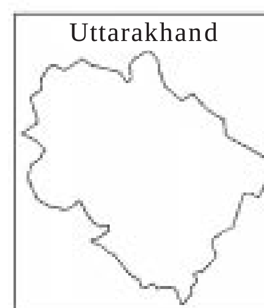
b) Cultural Religious Festival: (i) Makar Sankranti at Thirthamukh and Unokoti, (ii) Holi, (iii) Ashokashtami at Unokoti, Brahmakunda (Mohanpur), (iv) Rash (v) Bengali New Year, (vi) Garia, Dhamail, Biju and Hozagiri Festival, (vii) Boat Race and Manasa Mangal Festival, (viii) Ker and Kharchi Festival, (ix) Durgapuja, (x) Diwali, (xi) Christmas at Jampui Hills, (xii) Budha Purnima, (xiii) Rabindra-Najrul-Sukanta Utsav, (xiv) Street Drama Festival, (xv) Chongpreng Utsav, (xvi) Khumpui Festival, (xvii) Wah Festival, (xviii) Folk Cultural Festival (Loka Utsav), (xix) Murasing Festival, (xx) Sanghati Festival, (xxi) Baishakhi Festival (Sabroom), etc, are celebrated annually.

GOVERNMENT

Governor	:	Dinesh Nandan Sahaya	Chief Secretary	:	Shashi Prakash
Chief Minister	:	Manik Sarkar	Jurisdiction of	:	Falls under
Speaker	:	Remendra Debnath	High Court		Guwahati High Court Agartala Bench

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1.	North Tripura	2,820.63	5,90,913	Kailashahar
2.	South Tripura	2,151.77	7,67,440	Udaipur
3.	West Tripura	2,996.82	15,32,982	Agartala
4.	Dhalai	2,552.47	3,07,868	Ambassa



UTTARAKHAND

Area	:	53,484 sq km	Population	:	84,89,349
Capital	:	Dehradun	Principal Languages	:	Hindi, English, (Garhwali and Kumauni are local dialects)

HISTORY AND GEOGRAPHY

Uttarakhand finds mention in the ancient Hindu scriptures as Kedarkhand, Manaskhand and Himavant. The Kushanas, Kunindas, Kanishka, Samudra Gupta, the Pauravas, Katuris, Palas, the Chandras and Panwars and the British have ruled it in turns. It is often called the Land of the Gods (Dev Bhoomi) because of its various holy places and abundant shrines. The hilly regions of Uttarakhand offer pristine landscapes to the tourists.

The State of Uttarakhand was earlier a part of the United Province of Agra and Awadh which came into existence in 1902. In 1935, the name of State was shortened ot the United Province. In January 1950, the United Province was renamed as Uttar Pradesh and Uttaranchal remained a part of Uttar Pradesh before it was carved out of Uttar Pradesh on 09 November 2000. It is incepted as the 27th State of India.

Located in the foothills of the Himalayas, the State has international boundaries with China (Tibet) in the north and Nepal in the east. On its north-west lies Himachal Pradesh while on the south is Uttar Pradesh.

AGRICULTURE

About 90 per cent of the population of Uttarakhand depends on agriculture. The total cultivated area in the State is 7,99,837 hectares.

INDUSTRY AND MINERALS

The State is rich in mineral deposits like limestone, marble, rock phosphate, dolomite, magnesite, copper greyphyte, gypsum, etc. The number of small-scale industries is 28,249 providing employment to 72,621 persons. As many as 1434 heavy and

medium industries with an investment of Rs 34,000 crore employ 1.51 lakh persons. Most of the industries are forest-based. There are a total of 61,486 handicraft units in the state.

IRRIGATION AND ENERGY

Agricultural land under irrigation is 3,40,761 hectares. The State has excellent potential for hydropower generation. There are a number of hydro-electric projects on the rivers Yamuna, Bhagirathi, Bhilangana, Alaknanda, Mandakini, Saryu Gauri, Kosi and Kali generating electricity. Out of 15,596 villages, 14,660 villages have been electrified.

TRANSPORT

Roads : The total length of metalled roads in Uttarakhand is 18760 km. The length of PWD roads is 12,908 km. The length of roads built by local bodies is 2,239 km.

Railways : The main railway stations are Dehradun, Hardwar, Roorkee, Kotdwar, Kashipur, Udhamsingh Nagar, Haldwani, Ramnagar and Kathgodam.

Aviation : There are air strips at Jolly Grant (Dehradun), and Pantnagar (Udham Singh Nagar). Air strips at Naini-Seni (Pithoragarh), Gauchar (Chamoli) and Chinyalisaur (Uttarkashi) are under construction. From this year Pawan Hans Ltd., has started helicopter service from Rudraprayag to Kedarnath for pilgrims.

FESTIVALS

The world-famous Kumbh Mela/Ardh Kumbh Mela is held at Hardwar at every twelfth/sixth year interval. Other prominent fairs/festivals are : Devidhura Mela (Champawat), Purnagiri Mela (Champawat), Nanda Devi Mela (Almora), Gauchar Mela (Chamoli), Baisakhi (Uttarkashi), Magha Mela (Uttarkashi), Uttaraini Mela (Bageshwar), Vishu Mela (Jaunsar Bhabar), Peerane-Kaliyar (Roorkee), and Nanda Devi Raj Jat Yatra held every twelfth year.

TOURIST CENTRES

Prominent places of pilgrimage/tourist interests are Gangotri, Yamunotri. Badrinath, Kedarnath, Hardwar, Rishikesh, Hemkund Sahib, Nanakmatta, etc. Kailash Mansarovar Yatra can be performed through Kumaon region. The world-famous Valley of Flowers, Pindari Glacier, Roop Kund, Dayara Bugyal, Auli, and hill stations like Mussoorie, Dehradun, Chakrata, Nainital, Ranikhet, Bageshwar, Bhimtal, Kausani, Lansdowne etc. are the other tourist destinations.

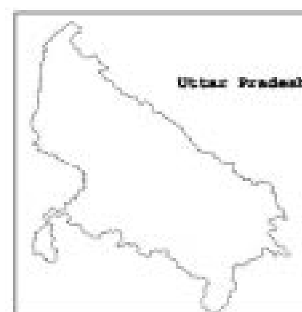
GOVERNMENT

Governor	:	Chief Secretary	: Surjit Kishore Das
Chief Minister	: B.C. Khanduri	Jurisdiction of	: Uttarakhand
Speaker	: Harbans Kapoor	High Court	Nainital

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S. No.	District	Area (sq km)	Population	Headquarters
1.	Uttarkashi	8,016	2,95,013	Uttarkashi
2.	Chamoli	8,030	3,70,359	Gopeshwar

3.	Rudra Prayag	1,984	2,27,439	Rudra Prayag
4.	Tehri Garhwal	3,642	6,04,747	New Tehri
5.	Dehradun	3,088	12,82,143	Dehradun
6.	Pauri Garhwal	5,329	6,97,078	Pauri
7.	Pithoragarh	7,090	4,62,289	Pithoragarh
8.	Champawat	1,766	2,24,542	Champawat
9.	Almora	3,139	6,30,567	Almora
10.	Bageshwar	2,246	2,49,462	Bageshwar
11.	Nainital	4,251	7,62,909	Nainital
12.	Udhamsingh Nagar	2,542	12,35,614	Udhamsingh Ngr. (Rudrapur)
13.	Hardwar	2,360	14,47,187	Hardwar



UTTAR PRADESH

Area	:	2,40,928 sq km	Population	:	16,60,52,859
Capital	:	Lucknow	Principal Languages	:	Hindi and Urdu

HISTORY AND GEOGRAPHY

The history of Uttar Pradesh is very ancient and interesting. It is recognised in the later Vedic Age as Brahmarshi Desha or Madhya Desha. Many great sages of the Vedic times like Bhardwaja, Gautam, Yagyavalkaya, Vashishtha, Vishwamitra and Valmiki flourished in this state. Several sacred books of the Aryans were also composed here. Two great epics of India, Ramayana and Mahabharata, appear to have been inspired by Uttar Pradesh.

In the sixth century BC Uttar Pradesh was associated with two new religions-jainism and Buddhism. It was at Sarnath that Buddha preached his first sermon and laid the foundations of his order and it was in Kushinagar in Uttar Pradesh where Buddha breathed his last. Several centres in Uttar Pradesh like Ayodhya, Prayag, Varanasi and Mathura became reputed centres of learning. In the medieval period Uttar Pradesh passed under Muslim rule and led the way to new synthesis of Hindu and Islamic cultures. Ramananda and his Muslim disciple Kabir, Tulsidas, Surdas and many other intellectuals contributed to the growth of Hindi and other languages.

Uttar Pradesh preserved its intellectual excellence even under the British administration. The British combined Agra and Oudh into one province and called it United Provinces of Agra and Oudh. The name was shortened to the United Provinces in 1935. In January 1950 the United Provinces was renamed as Uttar Pradesh.

The State is bound by Uttarakhand and Himachal Pradesh in the north, Haryana in the west, Madhya Pradesh in the South and Bihar in the east. Uttar Pradesh can be divided into two distinct regions (i) Southern Hills and (ii) Gangetic Plain.

AGRICULTURE

Agriculture is the main occupation of 66 per cent of the population of the state. The net cultivated area in the state is 167.50 lakh hectares. In the year 2003-04 the state produced 255.67 lakh metric tonnes of wheat, 130.22 lakh metric tonnes of rice, 23.80 lakh metric tonnes of pulses and 6.44 lakh metric tonnes of oilseeds and 1127.54 lakh tonnes sugar cane. Total foodgrains production during 2003-2004 was 442.58 lakh metric tonnes.

INDUSTRY AND MINERALS

During the year 2004-2005 there were 5,21,835 small-scale industrial units involving a total investment of Rs. 5131 crore and employment opportunities for 2001000 persons. About 45.51 lakh tonnes of sugar was produced in the state during the year 2003-2004. There were 68 textile units. Thirty-two automobile units with an investment of Rs. 5,740 crore provided jobs to 20280 persons.

It is planned to develop 102 sectors of New Okhla Industrial Development Authority (NOIDA) by the year 2011. The Authority includes industrial sectors,housing sectors,group housing sectors, residential buildings, commercial assets and institutional sectors. Steps have been taken to develop other industrial areas in the state on the pattern of Noida and Greater Noida. A Software Technology Park has been set up in Kanpur while five more Software Parks are proposed to be set up.

Under the public sector, mining of limestone, magnesite, coal, rock phosphate, dolomite and silicon-sand is carried out. The bulk production of minor and some of the major minerals like limestone, silica-sand, magnesite, pyrophyllite and diaspore is mostly with the private sector. Important mineral based industries include large cement plants in Sonebhadra.

IRRIGATION AND POWER

UP Power Corporation, UP State Power Generation and UP Hydel Power Corporation had been formed by reorganising UP State Electricity Board on 14 January 2000.

During 2004-05 an expenditure of Rs 98715 crore was made to raise the irrigation potential to a level of 319.17 lakh hectares. At the time of inception the total installed capacity of UPSEB, including thermal and hydro, was 2,635 MW which has now been raised to 4621 MW.

TRANSPORT

Roads : The total road length of PWD in the state is 118946 km. This includes 3869 km of national highways, 9097 km of state highways, 105980 of other district roads and 72,931 km of rural roads.

Railways : Lucknow is the main junction of the northern network. Other important railway junctions are Agra, Kanpur, Allahabad, Mughalsarai, Jhansi, Moradabad, Varanasi, Tundla, Gorakhpur, Gonda, Faizabad, Bareilly and Sitapur.

Aviation : There are airports at Lucknow, Kanpur, Varanasi, Allahabad, Agra, Jhansi, Bareilly, Hindon (Ghaziabad), Gorakhpur, Sarsawa (Saharanpur) and Fursatganj (Rae-Barelli).

FESTIVALS

The biggest congregation, perhaps of the world, Kumbha Mela is held at Allahabad every twelfth year and Ardh kumbh Mela every sixth year. Magh Mela is also held at Allahabad in January when the people come in large number to have a dip in the holy Sangam. Among other fairs is the fortnight long Jhoola fair of Mathura, Vrindavan and Ayodhya, when dolls are placed in gold and silver jhoolas or cradles. A dip in the Ganga on Kartik Poornamasi is supposed to be the holiest and there are big congregations at Garhmukteshwar, Soran, Rajghat, kakora, Bithur, Kanpur, Allahabad, Varanasi and Ayodhya. A famous cattle fair is held at Bateswar in Agra district. Dewa in Barabanki district has became famous because of the Muslim saint Waris Ali Shah. Besides, important festivals of the Hindus, Muslims, etc., are widely celebrated in the state.

TOURIST CENTRES

Uttar Pradesh has varied attractions for all kinds of tourists. Besides ancient places of pilgrimage like Varanasi, Vindhyachal, Ayodhya, Chitrakoot, Prayag, Naimisharanya, Mathura, Vrindavan, Dewa Sharief, Dargah of Sheikh Saleem Chisti in Fatehpur Sikri, Sarnath, Shravasti, Kushinagar, Sankisa, Kampil, Piprahwa and Kaushambi, places like Agra, Ayodhya, Sarnath, Varanasi, Lucknow, Jhansi, Gorakhpur, Jaunpur, Kannauj, Mahoba, Devgarh, Bithur, and Vindhyachal have rich treasures of Hindu and Islamic architecture and culture.

GOVERNMENT

Governor	:	T.V. Rajeshwar Rao	Chief Secretary	:	Naveen Chandra Bajpaei
Chief Minister	:	Kumari Mayawati	Jurisdiction of High Court	:	Uttar Pradesh

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

Sl. No.	District	Area (sq km)	Population	Headquarters
1.	2	3	4	5
1.	Agra	4,027	36,20,436	Agra
2.	Aligarh	3,650	29,92,286	Aligarh
3.	Allahabad	5,482	49,36,105	Allahabad
4.	Azamgarh	4,054	39,39,916	Azamgarh
5.	Bahraich	4,420	23,81,072	Bahraich
6.	Balia	2,981	27,61,620	Balia
7.	Banda	4,460	15,37,334	Banda
8.	Barabanki	4,402	26,73,581	Barabanki
9.	Bareilli	4,120	36,18,589	Bareilli
10.	Basti	2,688	20,84,814	Basti
11.	Bijnore	4,561	31,31,619	Bijnore
12.	Badaun	5,168	30,69,426	Badaun
13.	Bulandshahar	4,352	29,13,122	Bulandshahar
14.	Deoria	2,538	27,12,650	Deoria
15.	Etah	4,446	27,90,410	Etah
16.	Etawah	2,311	13,388,71	Etawah

17.	Faizabad	2,341	20,88,928	Faizabad
18.	Ambedkar Nagar	2,350	20,26,876	Akbarpur
19.	Fatehpur	4,152	23,08,384	Fatehpur
20.	Farukkhabad	2,181	15,70,408	Farukkhabad
21.	Gaziabad	1,148	32,90,586	Gaziabad
22.	Gautam Buddha Nagar	1,442	12,02,030	Gautam Buddha Nagar
23.	Gazipur	3,377	30,37,582	Gazipur
24.	Gonda	4,003	27,65,586	Gonda
25.	Gorakhpur	3,321	37,69,456	Gorakhpur
26.	Hamirpur	4,282	1043724	Hamirpur
27.	Hardoi	5986	3398306	Hardoi
28.	Jalaun	4565	1454452	Jalaun
29.	Jaunpur	4038	3911679	Jaunpur
30.	Jhansi	5024	1744931	Jhansi
31.	Kanpur (Dehat)	3021	1563336	Akbarpur Mati
32.	Kanpur (City)	3155	4167999	Kanpur
33.	Lakhimpur Kheri	7680	3207232	Lakhimpur Kheri
34.	Lalitpur	5039	977734	Lalitpur
35.	Lucknow	2528	3647834	Lucknow
36.	Mainpuri	2760	1596718	Mainpuri
37.	Mathura	3340	2074516	Mathura
38.	Meerut	2590	2997361	Meerut
39.	Mirzapur	4521	2116042	Mirzapur
40.	Moradabad	3718	3810983	Moradabad
41.	Muzaffarnagar	4,008	3543362	Muzaffarnagar
42.	Pilibhit	3,499	1645183	Pilibhit
43.	Pratapgarh	3717	2731174	Pratapgarh
44.	Raibareilli	4609	2872335	Raibareilli
45.	Rampur	2367	1923739	Rampur
46.	Jyotiba Phule Nagar	2249	1499068	Amroha
47.	Saharanpur	3689	1499068	Saharanpur
48.	Shahjahanpur	4575	2547855	Shahjahanpur
49.	Sitapur	5743	3619661	Sitapur
50.	Unnao	4558	2700324	Unnao
51.	Sultanpur	4436	3214832	Sultanpur
52.	Varansi	1535	3138671	Varansi
53.	Mau	1713	1853997	Mau
54.	Siddharthnagar	2895	2040085	Siddharthnagar
55.	Firozabad	2361	2052958	Firozabad
56.	Sonbhadra	6788	1463519	Robertsganj
57.	Maharajganj	2952	2167041	Maharajganj
58.	Sant Ravidas Nagar	1015	1353705	Bhadohi
59.	Mahoba	2884	708447	Mahoba
60.	Hathras	1840	1336031	Hathras
61.	Kaushambi	1780	1293154	Kaushambi

62.	Kushinagar	2906	2893196	Podraune
63.	Chandauli	2541	1643251	Chandauli
64.	Balrampur	3349	1682350	Balrampur
65.	Shrawasti	2458	1176391	Shrawasti
66.	Chitrakoot	3164	766225	Chitrakoot
67.	Baghpat	1321	1163991	Baghpat
68.	Kannauj	2093	1388923	Kannauj
69.	Orraiya	2015	1179993	Orraiya
70.	Sant Kabir Nagar	1646	1420226	Khalilabad



WEST BENGAL

Area	: 88,752 sq km	Population	:	8,01,76,197
Capital	: Kolkata	Principal Language	:	Bengali

HISTORY AND GEOGRAPHY

Bengal finds a coveted place even in pre-historic times. At the time of Alexander's invasion a powerful kingdom called Gangaridai ruled over Bengal. Ascendancy of the Guptas and the Mauryas had somewhat little effect on Bengal. Later Sasanka became King of Bengal and is said to have played an important role in north-eastern India in the early half of the seventh century. He was succeeded by Gopala, who founded the Pala dynasty, which ruled for centuries and had created a huge empire. The Palas were followed by the Sena dynasty which was ended by Muslim rulers from Delhi. Bengal was ruled by various Muslim rulers and governors till the Mughal period in sixteenth century.

After the Mughals, history of modern Bengal begins with the advent of European and English trading companies. Battle of Plassey in 1757 changed the course of history when the English first gained a strong foothold in Bengal and India. In 1905 it was partitioned to achieve some political returns but people's growing movement under the auspices of Congress led to the reunion in 1911. This triggered off hectic movement for freedom which culminated with Independence in 1947, and partition.

After 1947, the merger of native princely states began which ended with its final reorganisation in 1956 (as per Recomendations of the States Reorganisation Act, 1956) when some Bengali speaking areas of a neighbouring state were transferred to West Bengal.

The land frontiers of the State touch Bangladesh in the east and are separated from Nepal in the west, Bhutan lies in the north-east, while Sikkim is on the north.

On the west are the states of Bihar and Jharkhand, while in the south lies Orissa, and the Bay of Bengal washing its southern frontiers.

AGRICULTURE

Agriculture plays a pivotal role in the State's economy and nearly three out of every four persons is directly or indirectly involved in agriculture. The total food production in the State in 2005-06, was 15688 thousand tonnes. During 2005-06, the production of rice was 14510.8 thousand tonnes, of wheat 773.8 thousand tonnes and of pulses 174.5 thousand tonnes respectively. The production of oilseeds during the same period was 556.8 thousand tonnes and of potato 7462.5 thousand tonnes. The production of jute was 7989.2 thousand bales in 2005-06.

INDUSTRY

In 2006, 173 projects with a total investment of Rs. 3119.09 crore were implemented in the State. The important projects implemented in the State in 2006 are Ural India Limited's Rs. 70 crore heavy motor vehicle project, Siemens Public Communication Networks Private Limited's Rs. 200 crore switching network and radio network project and Shyam Steel industries private Limited's Rs. 150 crore sponge iron project. Apart from projects actually implemented, 21 major projects (projects with investment over Rs. 25 crore) with a total investment of Rs. 47242.76 crore were under implementation in West Bengal in the year 2006.

The largest number of major projects under construction is located in Purba Medinipur. Highest amount of investment took place in the Ion and steel industry, Automobile Industry and the Cement Industry. In Bankura, Birbhum and Coochbehar--the three industrially backward districts--3 major projects are under consturction. The major industrial projects include Ramswarup Lodh Udyog Limited's Rs. 450 crore sponge iron, pig iron coke, ductile iron and Hooghly Met coke and Power Co. Limited's Rs. 690 crore metallurgical coke project, Ural India's Rs. 528 crore project, Mitsubishi Chemical's Rs. 1760 crore project, Rampurai Balaji Steel's Rs. 1240 crore project. Shree Renuka Sugar Limited is one of the largest sugar plants in India. In the automobile sector, three prestigious projects are those of Tata Motors, Global Automobiles of Xenitis group and Mahabharat Motors of Salim Group. Of these, the two wheeler project of Xenitis groups has started projection in February, 2007.

The State Government has recognized the need for faster economic development through creation of potential for industrial investment. The government is encourging foreign direct investment, both technical and financial, as may be appropriate or mutually advantageous. In conjunction with practical measures to sustain investor confidence, the State Government has introduced policy reforms in several areas has promulgated in quick succession its policies on the development of industries in Bio Technology, Mines and Mineral, Information Technology and IT Enabled services sectors.

The State Government has framed an Act on Special Economic Zone (SEZ). The first sector-specific SEZ in India, Manikanchan Gem and Jewellery Park, has already become operational in the State. Special Economic Zones are being set up in order to encourage hassle-free manufacturing and trading for export promotion. This entitles the domestic manufacturers to enjoy certain benefits like tax exemptions. Recently the Central Government has also approved the proposal for setting up a Chemical Hub in the State.

The State Government has also stressed on improving the infrastructure and services in the urban areas. It has also been trying to improve the road connectivity in the State by constructing new roads or improving and strengthening the existing road network.

The Rs. 1600 crore Kolkata megacity programme is being implemented by the KMDA. Under the programme a total of 130 schemes with a total cost of Rs. 1267.33 crore in various sectors like water supply, traffic and transportation, sewerage and drainage, solid waste management, housing and area development, commmercial complex, bustee improvement and conservation environment were taken up.

One of the most important infrastructural project being implemented in the State is the Rajarhat New Town Project covering an area of 3075 hectares on the north eastern fringe of Kolkata. Land acquisition and development has been completed in the Action Area-I covering 660 hectares. In action Area-II covering an area of 1050 hectares, land filling is in progress. In Area-III with total area of 1365 hectares, work has started.

The State Government is encouraging the development authorities to take up schemes on the basis of public private partnership (PPP). Siliguri-Jalpaiguri Development Authority is developing a new township near North Bengal Medical College on PPP basis. Asansol Durgapur Development Authority is developing a new township and commercial complexes with PPP. The Burdwan Development Authority (BDA) has taken up a number of schemes on PPP basis like development of a township, upgradation of collectorate and development of commercial complexes.

The West Bengal Industrial Infrastructural Development Corporation (WBIIDC) is the nodal state-level agency for developing infrastructure specifically for the industrial sector. WBIIDC has 12 growth centres (industrial estates) located at Kalyani (Phase, I, II, III), Falta, Uluberia, Bishnupur, Raninagar, Coochbehar, Malda, Debgram, Haldia and Kharagpur. WBIIDC is setting up four more growth centres at Jalpaiguri, Malda II phase, Bolpur and Falta III phase.

The West Bengal Industrial Development Corporation (WBIDC), the (prime agency in the state for promoting industries) has in recent years been increasingly involved in developing industrial infrastructure. This shift in WBIDC activity is related to the sharp upturn in industrial investment in the State in recent years. With investment flow no longer a problem, WBIDC promotional activities could best be supplemented by providing state of the art industry specific 'parks' to investors.

The State has identified the information technology (IT) sector as a priority sector for growth. The State formulated an IT policy in 2000 followed by a special incentive scheme introduced in 2001. The Government has also evolved a best-in-class package of fiscal incentives and regulatory support to investors.

During 2005-06, 250 IT and Information Technology enabled service (ITeS) companies were operating in Kolkata employing about 45000 professionals. The IT Hub at sector-V of Salt Lake is India's first fully integrated Electronic Complex spread over 150 acres of green pollution free area.

POWER AND IRRIGATION

The major imitative projects, namely, Teesta Barrage Project and Subarnarekha Barrage Project are currently being implemented in the State. During the first four

years of 10th plan only 28.475 thousand hectares of irrigation potential could be created. It is expected that irrigation potential of further 23000 hectares would be created during the last year of 10th plan in 2006-07. The potential created in the State upto 2005-06 is 1583.705 thousand hectares.

At present 9 medium irrigation schemes in the district of Purulia are continuing, out of which 3 schemes are being financed under AIBP. Altogether, irrigation potential of 12.01 thousand hectares has been created by the medium irrigation schemes during the first four years of the 10th plan and further one thousand hectares is proposed to be brought under irrigation during 2006-07. Large tracts of land in the district of Howrah, Hooghly, Purba Medinipur, North and South 24-Parganas have been brought under irrigation for cultivation of rabi crops and summer paddy during November to March end by judiciously allowing ingress of tidal water of river Hooghly through different drainage channels out falling into that river. About 144400 hectares have benefitted under the programme during 2005-06.

Power in West Bengal is currently generated by the West Bengal Power Development Corporation Limited, West Bengal State Electricity Board, Calcutta Electricity Supply Corporation, Durgapur Project Limited, Disergarh Power Supply Corporation etc. Total generation of power produced by the State agencies was 17568.3 MU in 2006-07 (upto November 2006) is 34078 and the total number of pump sets energized is 1,14,071.

TRANSPORT

Roads : The length of roads as on 31 March 2002 was 91970 km including 1898 km national highways. The length of roads under State highway is 3533 km, under PWD 12565 km and that of the district roads are 42,479 km respectively.

Railways : The total length of railway route in the State in 2005-06 was 4499.82 km. Hawrah, Asansol, Sealdah, Bandel, Bardhaman, Kharagpur and New Jalpaiguri are the main junctions.

GOVERNMENT

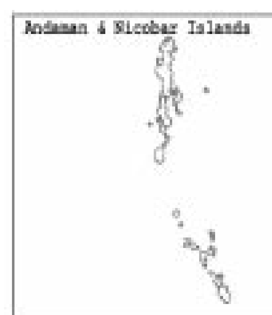
Governor : Gopal Krishna Gandhi
Chief Minister : Buddhadeb Bhattacharjee
Speaker : Hasim Abdul Halim
Chief Justice : S.S. Najjar
Chief Secretary : Amit Kiran Deb
Jurisdiction of High Court : West Bengal and Andaman and Nicobar Islands

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (sq km)	Population	Headquarters
1.	Bankura	6,882	31,91,822	Bankura
2.	Bardhaman	7,024	69,19,698	Bardhaman
3.	Birbhum	4,545	30,12,546	Suri
4.	Kolkata	185	45,80,544	Kolkata
5.	Darjeeling	3,149	16,05,900	Darjeeling
6.	Howrah	1,467	42,74,010	Howrah
7.	Hooghly	3,149	50,40,047	Chinsurah
8.	Jalpaiguri	6,227	34,03,204	Jalpaiguri

9.	Coochbehar	3,387	24,78,280	Coochbehar
10.	Malda	3,733	32,90,160	English Bazar
11.	Medinipur	14,081	96,38,473	Medinipur
12.	Murshidabad	5,324	58,63,717	Berhampore
13.	Nadia	3,927	46,03,756	Krishnagar
14.	North 24 Parganas	4,094	89,30,295	Barasat
15.	South 24 Parganas	9,660	69,09,015	Alipore
16.	Purulia	6,259	25,35,233	Purulia
17.	Uttar Dinajpur	3,140	24,41,824	Raigunj
18.	Dakshin Dinajpur	2,219	15,02,647	Balurghat

Note : The district Medinipur has been bifurcated on 1 January 2002 into Purba and Paschim Medinipur (the population figures of census 2001 are yet to be incorporated).



ANDAMAN AND NICOBAR ISLANDS

Area	: 8,249 sq km	Population	:	3,56,152 (2001 census)
Capital	: Port Blair	Principal Languages	:	Hindi, Nicobarese, Bengali, Tamil, Malayalam, Telugu

HISTORY AND GEOGRAPHY

The Union Territory of the Andaman and Nicobar Islands, is situated between 6° and 14° North Latitude and 92° and 94° East Longitude. The group of 572 islands / Islets lies in the Bay of Bengal, 193 km from Cape Negaris in Burma (Myanmar), 1,255 km from Kolkata and 1,190 km from Chennai. Two principal groups of islets are Ritchie's Archipelago and Labyrinth Islands. The Nicobar Islands are situated to the south of Andamans, 121 km from Little Andaman island. There are 38 inhabited islands, including 25 in the Andaman district and 13 in the Nicobar district.

The original inhabitants of the islands lived in the forests on hunting and fishing. There are four Negrito tribes, viz., the Great Andamanese, Onge, Jarawa and Sentinalese in the Andaman group of islands and two Mongoloid tribes, viz., Nicobarese and Shompens in the Nicobar group of islands. Sentinalese are still hostile. They are still keeping a separate entity and have not yet learnt the concept of covering their bodies.

AGRICULTURE

A total of 51,694.35 hect. of area 8068.71 hectares. under agriculture and plantation in the Andaman and Nicobar Islands was damaged by Tsunami / Earthquake. Out of that paddy and other field crops in 2177.70 ha. and 5891.01 ha. under plantation

crops. Area under permanent submergence is 4206.64 hect. with paddy and other field crops.

Paddy the main food crop, is mostly cultivated in Andaman group of Islands, whereas Coconut and Areca nut are the cash crops of Nicobar group of Islands. Field crops, namely, pulses, oilseeds and vegetable are grown followed by paddy during Rabi season. Different kinds of fruits such as mango, sapota, orange, banana, papaya, pineapple and root crops are grown on hilly land owned by the farmers. Spices, viz. pepper, clove, nutmeg and cinnamon are grown under multitier cropping system. Rubber, red oil, palm and cashew are grown on a limited scale in these Islands.

FORESTS

Recorded forest is 7,171 sq km of the total geographical area of the islands. Many types of forests are found in the islands, such as tropical wet evergreen, tropical semi-evergreen, moist deciduous, littoral, mangrove and swamp forests. A large variety of timbers are found in the Andaman group of islands. The most valuable timbers are padauk and gurjan. These species are not found in Nicobar.

WILD LIFE

There are 96 Wildlife Sanctuaries, 9 National Parks and 1 Biosphere Reserve in these Islands. Mammals - out of 55 terrestrial and 7 marine mammal species reported so far, 32 species are endemic. Birds - as many as 246 species and sub species of birds are reported to inhabit these Islands and of these 99 species and sub-species are endemic. Reptiles - there are 76 terrestrial reptiles found here, of these, 24 species are endemic. Marine Line -Islands harbour more than 1,200 species of fish, 350 species of echinoderms, 1,000 species of molusces and many more lower forms of life. Among vertebrates dugongs, dolphins, whales, salt water crocodiles, sea turtles, sea snakes, etc., are common. Coral and Coral reefs - so far 179 species of corals belonging to 61 genera have been reported. Reefs are mostly fringing type on eastern coast and barrier type on the western coast.

INDUSTRY

There are 1763 registered Small scale village and Handicrafts Units as on 31 March 2006. Two units are 100 per cent export oriented units in the line of Fish / Prawn processing activity. Apart from this, there are shells and wood based handicraft units. SSI units are engaged in the production of paints and varnishes, mini flour mills, soft drinks and beverages, steel furniture and fixtures, readymade garments, steel gate grills and structures. Small-scale handicraft units are also engaged in shell crafts, bakery products, rice milling, furniture making, etc. The Andaman and Nicobar Islands Integrated Development Corporation in the Public sector has spread its wings in the field of Tourism, Fisheries, Industries and Industrial financing and functions as authorized agents for Alliance Air / Jet Airways / Air Deccan.

TRANSPORT

The Motor Transport Department of A & N Administration has extended its service to 10 (ten) Islands besides Port Blair in this Union Territory. The span of services extends from Diglipur in the North to Campbell Bay in the South. The State Transport Service is operating around 143 Buses on 75 routes. The Administration has given route permits to private bus operators to ensure proper connectivity of places. The

Andaman Trunk Road Services connects Port Blair with Rangat, Mayabunder and Diglipur.

The massive earth quake followed by tsunami on 26 December 2004 completely destroyed the infrastructure of the State Transport Service in Little Andaman, Car Nicobar, Katchal and Campbell Bay. However the service was restored within a period of two months in all the islands and the public transport service is almost normal in all the tsunami affected islands of the Union Territory. To restore public transport service in the southern group of islands immediately after tsunami buses from Port Blair were taken out of their existing routes and sent to the southern group of islands where the entire transport service was completely dislocated.

The infrastructure at Hut Bay, Katchal and Campbell Bay which suffered severe damages are being rebuilt / repaired in order to facilitate better transport service to the residents of the Southern group of islands.

TOURISM

Andaman and Nicobar Islands have been recognised as an eco-friendly tourist's destination. As a tourist paradise, these islands have something very special to offer like Cellular Jail, Ross Island and Havelock Island.

The Andaman tropical evergreen rain forests, beautiful silver sandy beaches, serpentine mangrove-lines creeks, marine life abounding in rare species of plants, animals, corals, etc., provide a memorable experience to the tourists. There is tremendous scope for enjoying nature in the beach resorts, water sports and adventure water sports, adventure tourism like trekking, Island camping, Nature trail, Scuba Diving, etc.

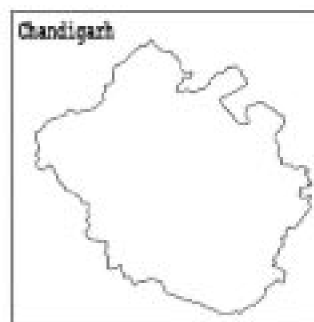
Tourism Department runs guest houses in various parts of the Islands for comfortable accommodation to tourists visiting these Islands. The important places of tourist interest are Anthropological Museum. Marine Museum, Water Sports Complex, Gandhi Park, North Bay, Viper Island, Ross Island, Chidiyatapu, (Bird watching), Red Skin Island, Corbyn's cove Beach, Islands like Neil Island, Havelock Island, Cinque, Little Andaman, Diglipur (Ross and Smith), etc. Tented accommodation is available at Radha Nagar beach from December to May. The best season to visit these Islands is from October to May.

GOVERNMENT

Lt. Governor	: Lt. Gen. (Retd.) Bhupinder Singh, PVSM, AVSM,
Chief Secretary	: Shumsher K Sheriff
Jurisdiction of High Court	: Falls under the jurisdiction of Kolkata High Court

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (sq km)	Population	Headquarters
1.	South Andaman	3181.401	2,08,471	Port Blair
2.	Nicobar	1,841	42,068	Car Nicobar
3.	North and Middle Andaman	3226.599	1,05,613	Mayabunder



CHANDIGARH

Area	: 114 sq km	Population	: 9,00,635
Capital	: Chandigarh	Languages	: Hindi, Punjabi, English

HISTORY AND GEOGRAPHY

Chandigarh is a fully grown town of most modern architectural splendour. The city nestles in a picturesque setting in the foothills of Shivalik hills and enjoys the popular epithet the "City Beautiful". Representative of modern architecture and town planning, the city is a creation of the French Architect, Le Corbusier. Chandigarh and the area surrounding it were constituted as a Union Territory on 1 November 1966. It serves as the joint capital of both Punjab and Haryana States. It is bound on North and West by Punjab and on the East and South by Haryana.

ADMINISTRATION

Chandigarh Administration is moving on four broad fronts. First, it is our aim to provide, with the help of information technology, an accessible and transparent administration. We were among the earliest to implement the provisions of the Right to Information Act. A number of services, for which citizens earlier had to go to government offices, are now available on computer and mobile phones. All rules are being reviewed to see what simplification can be carried out to make them user-friendly. The purpose is to minimise the exercise of discretion, and minimise the leg work of the citizen in dealing with the Administration.

Secondly, the Administration is working towards a higher rate of economic growth by encouraging economic activities which provide greater value addition, such as knowledge based industries, high-end commercial activity, etc., Chandigarh already has the highest per capita income in the country.

Thirdly, the Administration is seeking to provide infrastructural services such as electricity supply, water supply, health and educational services and public transport which should compare with those in advanced countries. It will take time, but we believe that our ambitions can be achieved in the medium term.

Fourthly, the Administration is all too conscious of the fact that the benefits of development do not reach everyone equally. Hence there is a special emphasis on reaching out to those whom development has by-passed.

INFORMATION TECHNOLOGY

Chandigarh has made strides in the field of Information Technology which today is synonymous with development and progress. 25 September 2005 will be remembered as a red letter day in the history of Chandigarh. On that day the Prime Minister, Dr. Manmohan Singh, inaugurated the Rajiv Gandhi Chandigarh

Technology Park. This has added a fresh dimension to the economy of the city. The creation of a knowledge-based industry is an impetus to Chandigarh being seen as an investment destination for technology companies. This in turn will improve not only the quantity but also the quality of employment. The Administration is also considering the development of Chandigarh as a financial services hub. Projects like the Chandigarh Technology Park, Education City and Film City will further improve the level of economic activity. Chandigarh is becoming one of the preferred destinations for technology companies since it affords an excellent quality of life and a competent base of human resource.

In the second phase of the IT Park, Wipro has been made an anchor company and Bharti Teleservices has also been allotted land to set up its software development centre-cum-campus. The 250 acre phase-II of the CTP will comprise of 115 acres for Technology Park and 135 acres for integrated support facilities. An Entrepreneur Development Centre (EDC) is also being established at the CTP. It would be available to IT/ITES/BPO companies for incubation and for setting up of plug and play facilities. It will have a research laboratory which will provide modern facilities for companies to work in.

WATER TREATMENT AND IRRIGATION

The Chandigarh Administration has also initiated action on the various projects to meet the objectives of Jawahar Lal Nehru National Urban Renewal Mission so as to have planned development of urban areas with focus on efficiency in urban services delivery system. The Municipal Corporation has already sent a project on Tertiary Water Treatment, seeking an assistance of Rs.35 crore to the Union Government. The Chandigarh Administration has made a provision of Rs.94.22 crore of tax revenue for the Municipal Corporation. In addition to this, Rs.7.03 crore were also allotted for payment of street light bills. The Administration has also been giving additional grant to the Municipal Corporation for creation of civic amenities under various projects. Recently Rs. 50 lakh were given to the Municipal Corporation for upgradation of facilities in Sector 17.

Chandigarh Administration has always endeavoured to improve the infrastructural facilities of the city. The Administration is giving top priority to the conservation of water. The Administration has been working in close coordination with the Municipal Corporation to provide various civic amenities and services. The augmentation work of water supply scheme, Phase-IV has been completed at the cost of Rs. 4722 lakh, 25 new deep tube wells have been installed at various parts of the city at the cost of Rs.300 lakh, and 12 new irrigation tube wells have been installed at the cost of Rs.100 lakh for supply of water for irrigation. A 5 MGD Sewerage Treatment Plant has been constructed at the cost of Rs.505 lakh in village Raipur Kalan for treating sewage affluent of Manimajra. The sewerage and storm water drainage system of the city has further been augmented and strengthened at the cost of Rs.235 lakh.

There is a proposal to upgrade the Sewerage Treatment Plant at Diggian to 45MGD at an estimated cost of Rs.3200 lakh. The Tertiary Water Distribution Network will be further augmented at the cost of Rs.2200 lakh. Construction of a 2MGD Sewerage Treatment Plan at Maloya at the cost of Rs.300 lakh is also in pipeline. For further augmenting the water supply, 19 new tube wells will also be installed at a cost of Rs. 300 lakh.

ENVIRONMENT

For healthy living, the sustainability of environment and conducive atmosphere is important. In this regard, the Municipal Corporation has developed Green Belts in Sec 38C&D and 24A, B, C&D. Shivalik Garden in Manimajra (Pocket No.7) is being developed at a cost of Rs.200 lakh. Around 5000 trees and shrubs have been planted during the last six months. Community Centers are being constructed at Modern Housing Complex, Manimajra, Sec.28B and Sec.30B at the cost of Rs.50 lakh. For the convenience of commuters, the Corporation has constructed 48 state of the art bus queue shelters.

POWER

Chandigarh has one of the better power supply and electricity distribution systems in the country. We have undertaken a project to provide electricity with a reliability of 99.99 per cent within two years. Keeping in view the need for a quick and efficient public transportation system for Chandigarh, a new Grid Transport System has been introduced. Expressions of interest have been invited for a rail based mass rapid transit system.

EDUCATION AND HEALTH

It is one of the priorities to give the social sector especially education and health a definite and desired thrust. Recently, the administration has launched an ambitious Nutrition Programme which aims at maintaining the health and well being of school children. Under the programme, healthy cooked meals such as chapattis, vegetables and dal are being given to the students free of cost especially in colonies, villages, rehabilitation colonies and non-model schools whose pupils are from low income families. In the second phase, other schools will also be supplied same cooked food. Simultaneously teams of doctors would regularly visit schools for repeated monitoring to provide nutrition supplements in tablet form to nutritionally deficient children at least for six months. All anemic and worm affected children examined by the School Health Teams would be provided treatment for three months. For worm infestation, the first dose will be given on the spot while the teachers can be assigned the tasks of administering the second dose on the next due date. Children needing further medical treatment, dental treatment and eye check ups would be referred to the appropriate Hospital for further treatment. The parents of the school going children in the target areas including rehabilitation and labour colonies would be sensitized repeatedly about nutritional requirements, deficiencies and diseases. The Chandigarh Administration has taken the lead in providing free and compulsory education to all children of the age group 6-14 years as enshrined in our constitution. The fee upto class VIII chargeable from students has also been abolished in all government schools. Not only this, the system of collection of funds from the students in the government schools has also been abolished from December 2005 and the requirement of the government schools will be met from the budget of the Administration. It has also been decided that all students in non-model schools upto class VIII will be provided free books and all children studying in non-model schools upto class VIII will be provided free school uniforms from the forthcoming session.

In its endeavour to provide accessible, affordable and reliable health care to the citizens of Chandigarh, the Administration has taken several steps to improve, upgrade and modernise the existing health facilities and infrastructure. Several state-

of-the-art facilities have been started at the Government Medical College and Hospital, Sector 32 and the General Hospital, Sector 16 to provide better patient care. The existing system of the GMCH is being networked and the process to start endoscopic surgery in the Department of Gynaecology has also been started. Computerised radiography system and digital radiotherapy will be installed in the Department of radio-diagnosis of the GMCH. Seven well-equipped operation theatres along with Post Anesthesia Care Unit and Post Operative Ward will be commissioned in the GMCH. Toxicology Laboratory will be established to facilitate patient care with regard to analysis of chemical and poison at the GMCH. Foundation stone of the Regional Institute for Mentally Handicapped at Sector 31-C has been laid.

The Emergency Block of the General Hospital, Sector16 will be renovated and a 6-storeyed OPD Block has been planned in the General Hospital. Help Desk at the General Hospital, Sector 16, has been established for convenience of patients and provision for blue coloured cards, for according preference to senior citizens in outdoor clinics has been made. Uniformity is being brought at primary level by outsourcing laboratory investigations at the rates equivalent to that of user charges fixed by the Administration. The National Board of Examination and the Union Ministry of Health and Family Welfare have accredited the General Hospital 16 to award Post Graduate Diploma in Gynecology and Pediatrics. There is a proposal to upgrade the School of Nursing into College of Nursing. The patients below poverty line and patients under financial distress are provided free OPD / Indoor treatment. The Chandigarh Administration has set up a Drop-in-Centre for HIV patients to improve their quality of life and a new Voluntary Counseling and Testing Centre has also been established at Community Health Centre, Manimajra

COMMERCE AND TRADE

With an aim to create an entrepreneur friendly environment all the major decisions are taken in consultation with the user groups. Public opinion on the Excise Policy 2006-07 has been sought by the Chandigarh Administration to make it more user friendly before its final implementation. The draft Excise Policy has been framed in consonance with the Model Excise Policy / Taxation / Act Rules for alcoholic beverages circulated by the Union Ministry of Food Processing Industries. Simultaneously, it will also check the evasion of the excise duty and other taxes and substantially enhance the revenue of the Administration.

To boost commercial activities in the Union Territory of Chandigarh, the Administration has recently announced the liberalization of conversion from one trade to another. Under the policy, free conversion of trade in respect of the ground floors of commercial establishments has been allowed. Allottees of commercial sites and premises can pursue most trades without applying for conversion and without paying for it on the ground floor.

WELFARE

A society is judged by the way it treats its downtrodden, poor, destitute, senior citizens and widows. In the field of social welfare, the Administration has taken several initiatives. An inclusive Vocational Training-cum-Production Marketing Centre is coming up in Sector 46, which would be a hub of training, trade, self-employment activities, early intervention and prevention of childhood disabilities and to make the children self supporting. The Centre will also cater to the needs of

deserving persons of the neighbouring states. A Vocational Training Programme for Persons with Disabilities is proposed to be funded under the Govt. of India's scheme where vocational training and sheltered workshops can be established. For the convenience of the pensioners, the Administration has started disbursing Old Age Pension, Widow Pension and Pension to Disabled Persons through Sampark Centres established in Sectors 10,15,18,23,43,47, Manimajra and Industrial Area Phase-I. Chandigarh Administration has set up a Maintenance Cell at the Chandigarh College of Engineering and Technology to provide maintenance services to the residents of the city in technical fields. It will also impart technical training in various fields to the people living below poverty line to make them self dependent wage earners.

The Administration has also launched a project under which local artisans will be provided a place to showcase their artifacts and a platform to exhibit and sell their products. A directory of artisans will be prepared which will be kept at the Panchayat Bhawan so that the artisans can be contacted whenever required. The artisans will also be encouraged to form cooperative societies for which all help will be extended to them by the Registrar Cooperative Societies so as to enable them to exhibit and sell their products in a profitable way. A Child Art Gallery in Government Museum and Art Gallery will be established.

HOUSING AND INFRASTRUCTURE

Chandigarh Administration has been making sincere efforts to meet the housing demand of the residents. Housing scheme for 96 one bedroom and 96 two bedroom flats in Sector 49 has recently been launched. Similarly, another housing scheme for 160 one bed room and 112 two bed room flats in Sector 49 is likely to be launched shortly. For economically weaker sections, 288 flats in Sector 38(West) and 400 flats in Sector 49 will be launched under another housing scheme. About 1600 multi-storeyed flats will be constructed in Sector 63 for which consultants are being engaged. Chandigarh Administration has earmarked 135 acres of land for residential facility in the CTP where about 2000 flats are expected to be constructed. About 90 acres of land has also been allotted to the CHB in Sectors 53, 54 and 55 for housing schemes. Chandigarh Administration is also in the process of earmarking 20 acres of land in Sector 52 for construction of houses of different categories for U.T. employees. Chandigarh Housing Board is being computerized to provide online data to public to check their accounts and pay dues online. Software for providing online information to the allottees has been prepared and property records are being computerised.

Chandigarh Police strives to provide a people friendly, transparent and responsive policing to the residents of the city with focus on professionalism and basic policing. The Chandigarh Police has recently launched an SMS information facility. The SMS information facility would enable any person to know status of public complaints submitted at the public window system and the status of their passport applications. The Common Integrated Police Application is also being introduced in all the police stations of the Union Territory of Chandigarh.

Chandigarh boasts of an excellent sports infrastructure in the country. Its modern sports infrastructure has further been strengthened. Flood lights with latest technology at a cost of Rs.1.67 crore have been commissioned at Hockey Stadium, Sector 42. The swimming pool at the Lake Club is being renovated and several world class facilities are being added to the Cricket stadium, Sector 16 to bring it on

par with an international cricket ground. Flood lights will also be installed. All weather swimming pool at Sports Complex, Sector 42, will be constructed

TRANSPORT

Chandigarh Transport Undertaking has the privilege to operate public transport plied on suburban routes, city routes and on inter-state routes. The length of national highways is 15.275 kms. Chandigarh is well connected by road and air as well.

TOURIST CENTRES

Important tourist centres are Rock Garden, Rose Garden, Sukhna Lake, Museum and Art Gallery, City Museum, Tower of Shadows, Geometric Hill Museum of Evolution, Kala Gram, Log Huts, Nepli Forests, Fitness Trails (in Leisure Valley), National Gallery of Portraits, Central Plaza, International Doll Museum and Smriti Upvan.

GOVERNMENT

Administrator	:	General (Retd.) S.F. Rodrigues	Adviser to the Administrator	:	Lalit Sharma
			Jurisdiction of High Court		Falls under jurisdiction of Punjab and Haryana High Court



DADRA AND NAGAR HAVELI

Area	:	491 sq km	Population	:	2,20,490
Capital	:	Silvassa	Principal Languages	:	Gujarati, Hindi

HISTORY AND GEOGRAPHY

After prolonged skirmishes between the Portuguese and Marathas, on 17 December 1779, the Maratha Government assigned the aggregated revenue of Rs 12,000 in a few villages of this territory to the Protuguese as compensation to ensure their friendship. The Portuguese ruled this territory until its liberation by the people on 2 August 1954. From 1954 till 1961 the territory functioned almost independently by what was known as "Free Dadra and Nagar Haveli Administration". However, the territory was merged with the Indian Union on 11 August 1961 and since then is being administered by the Government of India as a Union Territory. After liberation of the territory from Portuguese rule, a Varishtha Panchayat was working as an advisory body of the Administration. This was dissolved in August 1989 and a Pradesh Council for Dadra and Nagar Haveli District Panchayat and 11 Village Panchayats were constituted as per constitutional amendments at All India level.

The U.T. of Dadra and Nagar Haveli has an area of 491 sq km and it is surrounded by Gujarat and Maharashtra. It consists of two pockets, namely, Dadra and Nagar Haveli. The nearest railway station is at Vapi which is 18 km from Silvassa.

AGRICULTURE

Dadra and Nagar Haveli is a predominantly rural area with about 79 per cent tribal population. It has about 21,115 hectares under cultivation. Major crop is paddy (Kharif) while Nagli and other hillmillets are crops of the area. Among fruits Mango, Chiku and Banana, etc., are also produced. Forests cover 40 per cent of the total geographical area.

Sugarcane cultivation has also been taken up in a big way since the last few years. And efforts are afoot to adopt a multiple cropping system in assured irrigated areas. During 2006-07, 87 MT of H.Y.V. seeds, were distributed to 2211 farmers alongwith 1407 M.T. of chemical fertilizers to 6449 farmers. The organic farming scheme will shortly be implemented in Dudhani and Mandoni patelads. To this end, 60 Kisan Credit Cards have been issued.

The Wadi Development programme in the tribal area of both Dadra and Nagar Haveli is implemented by the N.G.O., B.A.I.F. with the financial allocation from NABARD, a total of 800 tribal and scheduled caste famileis will benefit.

INDUSTRY

Prior to 1965-66 there was no industry in the Union Territory. There were a few traditional craftsmen who used to make pots, leather items, viz., chappals, shoes and some other items of bamboo. Industrial development started on a low-key during 1967-68 with the establishment of an industrial estate under the cooperative sector by Dan Udyog Sahakari Sangh Ltd. Thereafter, three Government Industrial Estates have been developed at Silvassa, Masat and Khadoli in the U.T. With the inception of the economic liberalization policy, a real boost in industrial development was seen. Presently i.e. in 2006-07 there are 1863 small sector industrial units and 430 MSI/LSI units the U.T. functioning in the U.T. providing gainful employment to over 46,000 people.

IRRIGATION AND POWER

Prior to liberation of the territory, there was no irrigation facility and cultivators had to fully depend upon rainfall. After the merger of the territory with the Indian Union, adequate steps were taken under minor irrigation sector. So far 128 lift irrigation schemes have been completed on irrigation wells, surface water sources like rivers, check dams at various places in the territory crearing additional irrigation potential of 1,851 hectares. Under medium irrigation project viz., Damnganga Reservoir Project, about 115 km of minor canals and distributaries are falling in the area of this Union Territory. Development works have been completed in field channels in all respects in 4,300 hectares and testing is done in 4,049 hectares.

There was no rural electrification prior to liberation of this territory. The electricity was provided with only one DG Set which was installed and operated in Silvassa Town for VIPs at Circuit House.

After liberation, the UT Administration commenced rural electrification work with the co-operation of neighbouring State of Gujarat and completed electrification work in 25 villages by 1976. The power demand of the UT is met by Gujarat Electricity

Board through a single Circuit from Vapi-Silvasa and distributed amongst limited number of consumers. The first 66 KV Sub-Station was established at Amli in 1979. With the commissioning of the said Sub-Station, the electricity department is in a position to provide electricity to all villages.

One more 220/66 KV, 2x160 MVA sub-station at village Khadoli has been approved by the Ministry of Power. The Power Grid Corporation of India will execute this work, which is likely to be completed within three years. In addition to this, a proposal for the establishment of various 66/11 KV sub-station at Vaghdhara, Athal, Piparia, Sayli, Velugam etc is in the pipeline.

The Power requirement of the territory is being met from Central Sector Power Generating Stations located in the western region. At present the power allocation from the Central Sector is 270 MW. The power demand has increased tremendously due to rapid industrialisation with the extension of Tax Holiday benefit to this UT by the Government of India.

TRANSPORT

The Union Territory depends heavily on Maharashtra and Gujarat road network as the territory can be accessed only after crossing these two States from Mumbai. At present road length is about 635 km. out of which 570 km. is surfaced. Almost all villages are connected with all weather roads. The rail route from Mumbai to Ahmedabad links Vapi also. Mumbai is the nearest airport. Recently, the work of widening of roads in the Union Territory has been taken up to meet the requirement of increasing vehicular traffic.

To meet the need of rapid industrialisation, four laning work has been taken up in Silvassa and adjoining areas, besides other spillover works. Converting of two lane road to four lane road for a length of 17.69 kms has been completed. The Dadra — Tighra road is under progress and during the current financial year i.e. 2007-08, another 5.70 kms length of road connecting Silvasa and Naroli is likely to be converted into a four-lane drive.

TOURISM

Tourism sector has been assigned high priority keeping in view the dense forest area and favourable climate.

The prominent places of tourist interest are Tadekeshwar Shiva Mandir, Bindrabin, Deer Park at Khanvel, Vanganga lake and Island Garden, Dadra, Vanvihar Udhyan Mini Zoo, Bal Udhyan, Tribal Museum and Hirvavan Garden at Silvassa. The development of water sports at Dudhani has been completed. The construction of an Amphitheatre close to Yatri Niwas, Silvassa is under progress. To encourage tourism activities, some traditional and modern cultural activities like celebreation of Tarpa Festival, Kite festival, World Tourism day, etc., are organised every year.

FESTIVALS

Normally all festivals of Hindus, Muslims and Christians are celebrated in the territory, while tribals celebrate their own festivals. Diwaso is celebrated by Dhodia and Varli tribes and Raksha Bandhan is celebrated by Dhodia tribe. Other festivals include Bhawada amongst Varlist, Koli tribes and Khali Puja by all tribes after harvesting of crops and Gram Devi before harvesting of crops.



DAMAN AND DIU

Area :	112 sq km	Population	: 1,58,204
Capital :	Daman	Principal Languages :	Gujarati

HISTORY AND GEOGRAPHY

Daman and Diu along with Goa was a colony held by the Portuguese even after Independence. In 1961, it was made an integral part of India. After Goa was conferred with statehood, on 30 May 1987, Daman and Diu was made a separate Union Territory. Daman lies about 193 km away from Mumbai. It is bound on the east by Gujarat, on the west by the Arabian Sea, on the north by the Kolak river and on the south by Kalai river. The neighbouring district of Daman is Valsad in Gujarat. Diu is an island connected by two bridges. The neighbouring district of Diu is Junagadh of Gujarat.

AGRICULTURE AND IRRIGATION

Total irrigated area is 393.93 h.a. and un-irrigated area is 3304.73 hectares as per the Agricultural Census 2000-01. In 2000-01 the net area under cultivation was 3375.65 h.a. Important field and garden crops are paddy, ragi, bajra, jowar, groundnut, pulses and beans, wheat, banana, sapota, mango, chickoo, coconut and sugarcane. There are no major forests in the territory.

INDUSTRY AND POWER

There are 2930 small-scale and medium-scale industries in Daman and Diu. Two industrial areas have been developed by Omnibus Industrial Development Corporation at Daman. The other industrial areas are Dabhel, Bhimpore, Kachigam and Kadaiya.

All villages have been electrified. Daman and Diu have got adequate power allocation from Central sector power stations in western region.

TRANSPORT

Roads : The total length of roads in Daman and Diu are 191 km and 78 km respectively.

Railways : There is no railway link with Daman and Diu. The Nearest railway station from Daman is Vapi on western railway on Mumbai-Delhi route. The nearest railway station from Diu is Delvada on meter-gauge.

Aviation : There are airports both in Daman and Diu. Diuis connected by air and there is regular air service from Mumbai to Diu.

TOURIST PLACES

Important tourist places in Daman are as under : Bom Jesus Chruch, Our Lady of

Sea Church; Our Lady of Remedios Church; Forts of Moti Daman and Nani Daman; Jampore and Devka Beaches; Public Garden at Nani Daman and Moti Daman Jetty, Pargola Garden, Moti Daman; Amusement Park, Devka; Damanganga Tourist Complex, Kachigam; Satya Sagar Udyan; Mirasol Garden; Mirasal Water Park.

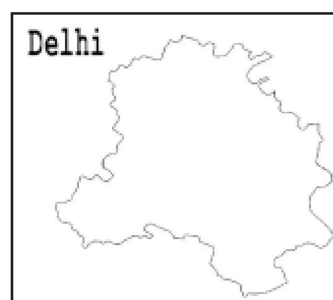
In Diu, St. Paul's Church; Diu Fort and Panikota Fort; Nagoa and Chakratirth and Children's park at Ghoghla and Summer House.

GOVERNMENT

Administrator	:	R.K. Verma
Development Commissioner	:	Dharmendra
Finance Secretary	:	P.K. Gupta
Collector, Daman	:	Vikas Anand
Collector, Diu	:	J.B. Singh
Jurisdiction of High Court	:	Falls under Mumbai High Court

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (sq km)	Population	Headquarters
1.	Daman	72	1,13,989	Daman
2.	Diu	40	44,215	Diu



DELHI

Area	:	1,483 sq km	Population	:	13.80 million
Capital	:	Delhi	Principal Languages	:	Hindi, Punjabi, Urdu & English

HISTORY AND GEOGRAPHY

Delhi finds prominent reference right from the times of the epic Mahabharata. Its control passed from one ruler / dynasty to another, beginning with the Mauryas, Pallavas, Guptas of Central India and then going on to the Turks of Afghan during the 13th to 15th centuries, and finally to the Mughals in the 16th century. In the latter half of the 18th century and early 19th century, British rule was established in Delhi. In 1911, Delhi became the centre of all activities after the capital was shifted from Kolkata (Calcutta). It was made a Union Territory in 1956. Lying in the northern part of the country, Delhi is surrounded by Haryana on all sides except the east where it borders with Uttar Pradesh. The 69th Constitutional amendment is a

milestone in Delhi's history as it got a Legislative Assembly with the enactment of the National Capital Territory Act, 1991.

AGRICULTURE

The principal food crops are wheat, bajra, jowar, gram and maize. However, emphasis has now shifted from food crops to vegetables and fruit crops, dairy and poultry farming, floriculture, etc., as these are more remunerative than food crops in the territory.

INDUSTRY

Delhi is not only the largest commercial centre in northern India, but also the largest centre of small industries. These units manufacture a wide variety of items like television, tape recorders, light engineering machines and automobile parts, sports goods, bicycles and PVC goods including footwear textiles, fertilizers, medicines, hosiery, leather goods, software, etc.

Delhi's new millennium industrial policy, emphasizes setting up of high-tech and sophisticated industries in electronics, telecommunications, software industries, IT enabling services, etc. The industries, which are non-polluting and encourage high value addition and depend largely on skilled manpower are being promoted. DSIDC is setting up a Training Institute for Gems and Jewellery and Assaying and Hallmarking Centre at Okhla in the building of Hitech Vocational Centre.

For the purpose of relocating industrial units functioning in residential non-conforming areas, the Government of NCT of Delhi took possession of 1900 acres of land at village Bawana, Holambi Kalan and Holambi Khurd for developing new industrial estates. Bawana Industrial area developed by DSIDC is the largest in Asia and is spred over 1900 acres of land. At Narela 900 plots have been developed and allotted and another 600 plots are being developed. Work of construction of 378 flatted factories at Jhilmil Industrial Area for relocation of smaller units has been completed. 450 acres of land have been taken for development at the Bhorgaarh industrial estates. In addition to the above, 652 hectares of land is being acquired for development into a huge industrial area in Kanjhawala / Kerala.

IRRIGATION AND POWER

Due to fast urbanisation of the rural areas of Delhi, cultivable command area under irrigation is getting reduced day by day. Two schemes, namely, "Keshopur Effluent Irrigation Scheme Phase-III" and "Improvement and Extension of Effluent Irrigation System from Coronation Treatment Plant" are under execution. Irrigation of about 350 hectares with state tube-wells and 1,376 hectares from effluent water is being provided in the rural area of NCT of Delhi. In addition about 4,900 hectares of land is being irrigated from western Yamuna Canal network.

The firm availability of power for Delhi from its own generating units at Rajghat Power Houses, IP Station and Gas Turbines including Badarpur Thermal Station is of the order of 850-900 MW. The remaining power is drawn from Northern Regional Grid. Delhi has also envisaged a number of generating projects to be taken up. Pragati Combined Cycle Power Project has been established at Indraprastha Estate. A 330 MW Pragati Power Project under construction is scheduled to be commissioned soon. The test run for its first phase of 100 MW has already started. The work of newly planned 330 MW gas based power plant under Pragati-II and 1000 MW power plant planned at Bawana is going on. Existing coal-based Indraprastha plant is being replaced by 1000 MW gas based plant.

To streamline the distribution of power, DVB has been privatised and Delhi is now served by the two of the best electric utilities in India, BSES and Tata Power (NDPL).

TRANSPORT

Delhi is well connected by roads, rail and air with all parts of India. It has three airports—Indira Gandhi International Airport for the international flights, Palam Airport for domestic air services and Safdarjung Airport for training purposes. It has three important railway stations — Delhi Junction, New Delhi Railway Station and Nizamuddin Railway Station. Delhi has three inter-state bus terminals at Kashmeri Gate, Sarai Kale Khan and Anand Vihar.

Keeping in view the rising vehicular pollution and chaotic traffic condition in the city of Delhi, it has been decided to start Mass Rapid Transit System (MRTS) in Delhi. The Project is under implementation and is uses the state-of-the-art modern technology. The metro rail project runs in Delhi. Now three metro corridors exist in phase-1 of Delhi Metro comprising of three corridors of total length of 65.1 Km have been completed and operational in record time with full commissioning of line from Shahdara to Rithala and Vishwa Vidyalaya to Central Secretariat. The third line from Barakambha road to Dwarka is also running to provide better connectivity to the commuters from NCR region.

FESTIVALS

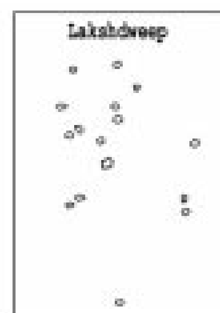
Being a cosmopolitan city, all major festivals of India are celebrated here. Moreover, some tourism festivals have become regular annual events of Delhi. Delhi Tourism and Transportation Development Corporation organises Roshnara Festival, Shalimar Festival, Qutab Festival, Winter Carnival, Garden Tourism Festival, Jahan-e-Khusrao Festival and Mango Festival every year.

TOURIST PLACES

Important tourist places are Lal Quila (Red Fort), Jama Masjid, Qutab Minar, India Gate, Laxmi Narian Mandir (Birla Mandir), Humayun's tomb, Lotus Temple, etc. Delhi Tourism and Transportation Development Corporation Limited conducts city sight-seeing and excursion tours. The Corporation has also introduced adventure tourism activities such as para-sailing, rock-climbing and boating in Delhi. The Corporation has also developed DELHI HAAT, where beverages and food items of different states are available at one place. More such HAATs are planned in different parts of Delhi. The Corporation is also running Coffee Homes in different parts of Delhi. The ''Garden of five Senses'' has also been opened in the South District of Delhi, which attracts a lot of tourists visiting Delhi.

GOVERNMENT

Lt. Governor	:	Tejinder Khanna	Chief Secretary	:	R. Narayanaswamy
Chief Minister	:	Sheila Dikshit	Jurisdiction of High Court	:	Delhi
Speaker	:	Ch. Prem Singh			



LAKSHADWEEP

Area	:	32 sq km	Population	:	60,650
Capital	:	Kavaratti	Principal Language	:	Jeseri (Dweep Bhasha) and Mahal

HISTORY AND GEOGRAPHY

Not much is known of the early history of these islands. The islands supposed to have been inhabited first are Amini, Andrott, Kavaratti and Agatti. It was earlier believed that the islanders were originally Hindus and later converted to Islam under the influence of Arab traders sometime in the 14th century. But Archaeological evidences unearthed indicate that there were Buddhist settlements around the 6th or 7th century. Earliest Muslim converts or settlers pre-date the year 139 AH of the Hijra year (eighth century) of which period grave stones have recently been discovered in Agatti. This would tend to bear out the traditional belief that Islam was brought to the Island by Arab Saint, Ubaidulla in 41 AH.

Probably independent till 16th century the Islands were driven to seek the assistance of Raja of Chirakal to help them avert establishment of Protuguese domination. This enabled him to establish his authority and, later, the islands were transferred in jaggeer to Ali Raja, head of Moplah community in Cannanore, who later became an independent ruler himself. The Arakkal rule was not popular and in 1787, Tipu Sultan acceded to the petitions of the Northern islands to annex these islands. After the fall of Tipu Sultan, the Islands were passed to East India Company but continued to be ruled de facto by the rulers of Cannanore till their ultimate annexation by the British in the early 20th century. In 1956, the islands were constituted into a single territory, and since then, have been directly administered by the Union Government through an Administrator. The Laccadives, Minicoy and Amindivi group of islands were renamed as Lakshadweep in 1973. Lakshadweep, a group of coral islands consist of 12 atolls, three reefs and submerged sand banks. Of the 27 islands, only 11 are inhabited. These lie scattered in the Arabian Sea about 280 km to 480 km off Kerala coast between 8^{o} and 12^{o} 3' North Latitude and 71^{o} and 74^{o} East Longitude.

AGRICULTURE

Coconut is the only major crop with a production of 580 lakh nuts per year. The area under cultivation is about 2,598 hectares. Lakshadweep coconut is branded as an organic product. In India, Lakshadweep stands first in coconut production and productivity per hector is 22,310 per hector and average yield per palm per year is 97 nuts. The Lakshadweep coconuts are the highest oil content nuts in the world (72 per cent).

FISHERIES

Fishing is another major activity. The sea around the island is highly productive. The islands stand first in the country in per capita availability of fish. During 2006, 11,751 tonnes of fish have been landed in this U.T.

INDUSTRIES

Coconut fibre extraction and conversion into fibre products is the main industry in the islands. Under Government Sector, there are seven coir fibre factories, five coir production cum demonstration centres and seven fibre curling units, functioning under coir sector. These units produced coir fibre and coir yarn in addition to other coir products like curled fibre, corridor mat, mat and mattings. A few coir twisting unit also function in private sector.

TRANSPORT

At present M.V. Sultan, M.V. Bharat Seema, M.V. Dweep Setu, M.V. Amindivi and M.V. Minicoy handles the passenger traffic in mainland-island and inter-island sector. Two inter-island ferry vessels M.V. Khadeeja Beevi and M.V. Hameedath Bee provide connectivity between the Islands except Minicoy island with Kavaratti as base port. The cargo traffic in this sector are handled with four cargo barges namely M.V. Ubaidulla, M.V. Thinnakara, M.V. Lacadives and M.V. Cheriyam. Further, one oil barge M.V. Suheli (60 MT) is being utilised for providing bunker to inter-island ferries. Besides, the administration operates an ambulance helicopter service between the islands and to mainland and Indian Airlines connects Agatti island and Kochi daily except Sundays.

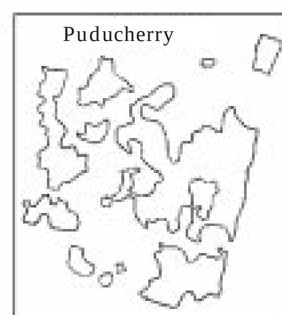
The 15 years Perspective Plan for shipping requirements in UTL are approved by the Ministry of Shipping. Government of India has recommended the acquisition of 3x150 passenger high speed vessels, 2x250 passenger cum 100 Mt Cargo ships, one 100 / 150 MT Oil Barge, one LPG cylinder ship, eight Landing Barges, one 400 passenger ship and two Bullard Tugs. Further, the Government of India has also sanctioned 3x50 passenger and one 15 passenger high sped inter-island feries under PMGSY scheme. Out of the above administration has placed construction orders for 3x150 passenger, 3x50 passenger and one 15 passenger high speed vessels and one 10T Bullard Tug. The Bullard Tug has been delivered on 9 May 2006 and and will be put in operation shortly. The 15 passenger and 150 passenger vessels are to be delivered by June 2007. As per the ship building contract for 2x250 passenger cum 100 MP cargo ships, the vessels are to be delivered between Dec. 2009 - 6 June 2010.

TOURIST CENTRES

Tourism is developing into an important industry. Important tourist places are Agatti, Bangaram, Kalpeni, Kadmat, Kavaratti and Minicoy, etc. 23330 Tourists visited the islands in 2006 of which 2622 are Foreign Tourists.

GOVERNMENT

Administrator	:	B.V. Selvaraj IAS
Jurisdiction of High Court	:	Falls under jurisdiction of Kerala High Court



PUDUCHERRY

Area :	479 sq km	Population	: 9,74,345
Capital :	Puducherry	Principal Languages	: Tamil, Telugu, Malayalam, English and French

HISTORY AND GEOGRAPHY

The territory of (Puducherry) comprises the former French establishment Puducherry, Karaikal, Mahe and Yanam, which lie scattered in South India. Puducherry, the capital of the territory was once the original headquarters of the French in India. It was under the French rule for 138 years and merged with the Indian Union on 1 November 1954. It is bounded on the east by the Bay of Bengal and on the three sides by Tamil Nadu. About 150 kms south of Puducherry on the East Coast lies Karaikal. Mahe is situated on the Malabar coast on the Western Ghats surrounded by Kerala. It can be reached from Calicut Airport, which is 70 kms from Mahe. Yanam is situated adjoining the East Godavari district of Andhra Pradesh and is about 200 kms from Visakhapatnam airport.

AGRICULTURE

Nearly 24.37 per cent of the population of the Union Territory is engaged in agriculture and allied pursuits. Eighty six per cent of the cultivated area is irrigated. Paddy is the predominant crop (65%) followed by pulses. Mahe region contributes to the plantation wealth of this territory. Crops like coconut, areca nut, condiments and spices are grown here. Pulses, groundnut and chillies are the other rainfed crops grown in Yanam.

INDUSTRY

7,837 Industrial Units in total with an aggregate investment of Rs 2,131.44 crores provided employment to 91,391 persons up to March 2007. The total value of production of these industrial units worked out to Rs 13,198.74 crores.

Further, during the financial year 2005-2006 (upto March 2006) the value of exports in respect of the various products manufactured by the export oriented units is Rs 706.69 crores.

IRRIGATION

Under the assistance from the European Union many tanks were rehabilitated. 8 bed dams across Pennaiyar at Sitheri were completed, a bed dam across Chunnambar at Nonankuppam is nearing completion. In addition to the above, necessary proposal to construct bed dams for ground water recharges at Aratchikuppam, Pambaiyar confluence point at Sellipet, across Malatar in Nettapakkam in Pondicherry and

across Mullaiyar, Pravadayanar and Vanjiar at Karaikal are proposed. Also the construction of a bridge-cum-barrage at Villanur is under progress.

POWER

The Power requirements of the Union Territory of Puducherry are met by availing share of power from the Central Generating Stations and by purchasing power from the neighbouring State Electricity Boards viz., Tamil Nadu Electricity Board, Kerala State Electricity Board and from the Pondicherry Power Corporation Limited at Karaikal respectively.

TRANSPORT

Four lane bridge at Ariyankappam has been taken up the Bridge across Sankaraparani River at Sellipet was completed. Draft plan on traffic and Transportation Engineering, which envisages short-term, long-term, and rapid action plan has been obtained and the works will be taken up in phased manner. New bridge construction has been taken in Karaikal region.

TOURISM

Located about 160 Km South of Chennai, Pondicherry (known in Tamil as Puddcherry), the former French Colony of the early 18^{th} Century, is a charming Indian town with a few enduring pockets of French Culture, and an Ashram set beside the sea. Together with the othe former French enclaves of Karaikal (also in Tamil Nadu), Mahe (Kerala), Yanam (Andhra Pradesh), it now forms the Union, Territory of Pondicherry. The uniqueness of this town invariably lies in skillful town planning and Franco Tamil architecture. The town is built on the model of "bastide", a fortified French coastal town of the late 18th Century.

Being the legendary abode of renowned saints, ancient trading settlement with Rome and Greece, once capital of French India, a spiritual Power house, Puducherry has touristic resources in the back waters, rivers, beaches and other areas developed as sustainable eco-tourist facilities. Influenced by East and West, Puducherry has unique handicrafts in leather pottery, hand made paper, incense and antique colonial furniture. Late Prime Minister Pandit Jawaharlal Nehru rightly described Puducherry as "the Window of French Culture".

Sri Aurobindo, the great seer, poet and prophet of Indian spirituality, preached his vision and ideals staying in Pondicherry till his life. His Ashram is still an unique institution with its distinctive way of life attracting people from all over the world.

GOVERNMENT

Lt. Governor	: Mukut Mithi	Chief Secretary	: Pradip Mehra
Chief Minister	: N. Rangaswamy	Jurisdiction of	: Falls under jurisdiction
Speaker	: R. Radhakrishnan	High Court	chennai, High Court

AREA, POPULATION AND HEADQUARTERS OF DISTRICTS

S.No.	District	Area (sq km)	Population	Headquarters
1.	Puducherry	290	7,35,332	Puducherry
2.	Karaikal	161	1,70,791	Karaikal
3.	Mahe	9	36,828	Mahe
4.	Yanam	20	31,394	Yanam

30 Diary of National Events

(OCTOBER 2006—AUGUST 2007)

OCTOBER 1

- Rakesh Mehra - directed Rang De Basanti, India’s official entry for best foreign language film at the Oscars will compete in seven main categories, including best film and best direction, at the 79th Annual Academy Award.
- Jammu and Kashmir Tourism Ministry starts a campaign projecting the State as not only safe but also an affordable destination.

OCTOBER 2

- As a mark of respect to Meeraben, a disciple of Mahatma Gandhi, the Indian Coast Guard names its latest fast patrol vessel after her. The induction of the ship into the Coast Guard takes place at the Okha port on the occasion of the 137th birth anniversary of Mahatma Gandhi.

OCTOBER 3

- India’s nominee Shashi Tharoor bows out of the UN Secretary-General race after the South Korean front-runner Ban Ki-Moon emerges a clear winner in straw poll.
- Indira Nooyi, the Chennai born CEO of PesiCo. is named the world’s most powerful woman in business this year by Fortune magazine.

OCTOBER 4

- The Government launches a programme of dyeing kerosene with an unremovable marker to stop its use as an adulterant in petrol and diesel.
- Railway Minister Lalu Prasad flags off the poor man’s AC train ‘‘Garib Rath’’ with almost 50 per cent cut in fares. The train will run from Saharsa (Bihar) to Amritsar.
- The Planning Commission suggests higher tariffs for household use of electricity.

OCTOBER 5

- Government constitutes a four-member Sixth Pay Commission, which will recommend revision of wages for Central Government employees within 18 months.
- Employes State Insurance Corporation raises the wage limit for coverage of employees under the ESI Act from Rs. 7,500 a month to Rs. 10,000 a month.
- Union Cabinet approves the restructuring of the 20-point programme (TPP) - initiated by Indira Gandhi in 1975 - to make it relevant to the 21st century ‘‘with particular reference to economic reforms, liberalization and globalization of the Indian economy’’. While doing so it replaces “Garibi Unmoolan’’ as the first point of the revised TPP with “Garibi Hatao".
- Prime Minister Manmohan Singh lays the foundation stone for the Rs. 2200-crore Western Railways dedicated freight corridor project, the largest single infrastructure project of the country.

OCTOBER 7

- Prime Minister Manmohan Singh pledges the nation an independent, transparent policy along with an enabling regulatory mechanism for public-private partnership projects while inaugurating a mega-conference on 'Building Infrastructure' in New Delhi.

OCTOBER 8

- The 74th annual celebrations of the Indian Air Force begin at the Hindon air base in Uttar Pradesh.

OCTOBER 9

- Senior Indian diplomat Satyabrata Pal is appointed as India's next High Commissioner to Pakistan.

OCTOBER 10

- Ban on the employment of children below the age of 14 years as domestic help in dhabas, restaurants, hotels and the hospitality sector comes into effect under the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.
- Prime Minister Manmohan Singh and British Prime Minister Tony Blair hold the third annual Indo-UK Summit in London.
- Britain's leading Indian industrialist Swaraj Paul takes over as the first Chancellor of the University of Westminister in Britain.
- Kiran Desai of India becomes the youngest woman writer and the third Indian to win the Man Booker Prize, as she wins the coveted prize for her novel The Inheritance of Loss, for the year 2006.

OCTOBER 11

- Supreme Court, in a judgment, holds that the power of pardon, clemency, reprieve or remission of sentence to a convict exercised by the President or the Governor is subjected to judicial review.
- Prime Minister Manmohan Singh is awarded an honorary degree of Doctor of Law by the University of Cambridge in England.

OCTOBER 12

- Prime Minister Manmohan Singh and his Finnish counterpart Matti Vanhanen hold the India-Finland Summit in Helsinki (Finland). Mr. Singh also addresses the seventh EU-India Business Summit in Helsinki.

OCTOBER 13

- Prime Minister Manmohan Singh stresses upon a multipolar world order based on well-defined rules and effective institutions at the seventh India-EU Summit in Helsinki.
- Planning Commission finalises its approach paper to the Eleventh Five-year Plan entitled "Towards Fast and More Inclusive Growth."

OCTOBER 14

- Hundreds of Dalits embrace Buddhism and Christianity at a mass conversion programme in Nagpur and burn copies of Gujarat Government's Anti-conversion Bill.

OCTOBER 15

- The dengue death toll in the country crosses the 100 mark; the number of total people affected crosses the 5,000 mark.
- Reliance Industry Limited's market cap increases to over 1,65,000-crore, making Mukesh Ambani, the richest person in India.

NOVEMBER 1

- Prime Minister Manmohan Singh says the UPA Government had not deviated from the basic objectives of the foreign policy, and it is only seeking a larger space in international affairs.
- Army Chief General J.J. Singh instructs his top commanders to probe fratricidal killings in the Army and come up with corrective measures.

NOVEMBER 2

- India and Britain decide to step up co-operation to tackle threats posed by terrorism and climate change, besides boosting the already buoyant bilateral economic relations. This emerges from a meeting between External Affairs Minister Pranab Mukherjee and visiting British Foreign Minister Margaret Beckett in New Delhi.
- Denouncing the indiscriminate issuance of fatwas by Muslim clerics, All India Muslim Personal Law Board vice-president Maulana Kalbe Sadiq says he would welcome it if the Government enacts a law to curb the phenomenon.

NOVEMBER 3

- CBI begins probing charges of corruption and financial irregularities against Rajya Sabha MP Najma Heptulla during her tenure as Indian Council for Cultural Relations Chairperson.

NOVEMBER 4

- Delhi University conferred an honorary degree to actor Amitabh Bachchan, Delhi Chief Minister Shiela Dikshit, Chief Scientific Advisor to Prime Minister C.N.R. Rao and cartoonist R.K. Laxman.

NOVEMBER 5

- Enumerating the salient features of the new 'model nikahnama', All India Shia Personal Law Board president Maulana Mirza Mohammad Athar says Shia women will have the right to initiate divorce proceedings against husbands who fail to live up to their duties and responsibilities.
- With a view to speeding up disposal of pending cases, Gujarat Government decides to start evening courts - an experiment being tried out for the first time in the country.
- Australian cricket team lift Champions Trophy beating West Indies at Kolkata.

NOVEMBER 6

- Supreme Court refuses to entertain applications filed by the Centre, the Delhi Government and the Municipal Corporation of Delhi seeking permission to stop sealing operations and allow over 30,000 traders, who had given affidavits, to continue their commercial activities in residential areas in the Capital.

- Supreme Court asks the Centre to set up a committee, headed by the former CBI Director R.K. Raghavan, to look into the steps to be taken to curb ragging in educational institutions.
- India ranks No. 70 on its Corruption Perception Index out of 163 nations, according to latest report by Transparency International. Last year India stood at No. 88 in the list.

NOVEMBER 7

- Film producer N.N. Sippy, best known for films like Kalicharan and Sargam, died in Mumbai. He was 75.
- Former Indian cricket captain Polly Umrigar passed away in Mumbai. He was 80.

NOVEMBER 8

- Indian guards at the Wagah Check-Post on the Pakistan border have abandoned the aggressive postures adopted during the daily beating the retreat ceremony held at sunset.
- Chief Commissioner for Persons with Disabilities issues a notice to Department of Personnel and Training, regarding three hearing impaired candidates who were denied postings despite clearing the All-India Civil Services examination.

NOVEMBER 9

- Union Cabinet approves the introduction of a Judges (Inquiry) Bill 2006 in the winter session of Parliament with a view to making High court and Supreme Court Judges accountable for their actions, including corruption and incapacity.
- Indians intending to travel to the US can now get visa appointments within a week and pay 30 per cent lesser visa fee, tells US ambassador David C. Mulford.
- Freedom fighters and their spouses would now get an enhanced pension of around Rs. 10,000 a month effective from October 2.
- Facing the gallows for his role in the 2001 Parliament terror attack, Mohammed Afzal Guru has petitioned President A.P.J. Abdul Kalam for mercy saying he did not get a fair trial in courts.

NOVEMBER 10

- US Assistant Secretary of State Richard Boucher says in New Delhi terrorist groups mounting attacks on India have their origin and links in Pakistan.
- CBI arrests another former naval officer, Commander J.C. Kalra in connection with its probe into the Navy war room leak case.
- RBI tells banks not tax interest earned from senior citizen saving schemes, provided relevant documents are submitted.

NOVEMBER 11

- The Left-affiliated SFI and AISA emerge victorious in the Jawaharlal Nehru University students' union elections.

- For the first time, India is sending an all-women contingent on a mission abroad. Equipped with lethal and non-lethal weapons, the fully trained 105-strong women Rapid Action Force team is heading for Liberia to maintain law and order there.

NOVEMBER 12

- Six persons, including two children were killed in their sleep and 14 injured when they were run over by a car carrying late night party revellers apparently drunk.

NOVEMBER 13

- Pakistan Foreign Secretary Riaz Muhammad Khan arrives New Delhi for two-day talks with his Indian counterpart Shivashankar Menon to review the composite dialogue between the neighbours.
- Supreme Court clears the decks for the development of an SEZ by Reliance Infrastructure Limited in Gujarat's Jamnagar district.
- Supreme Court dismisses an application seeking stay of the Delhi High Court verdict quashing the charges against the Hindujas in the Bofors pay-off case.

NOVEMBER 14

- BSNL slashes call rates from its PCO booths under which local and intra-circle calls to any network will be Re. 1 per minute, while STD calls will be cheaper by 50 paise.
- With India firmly rejecting the claim of the Chinese Ambassador to India Sun Yuxi in a TV interview that Beijing considers Arunachal Pradesh as its territory, External Affairs Minister Pranab Mukherjee categorically says that the state is an integral part of India.

NOVEMBER 16

- Union Cabinet decides to increase by 10,000 the number of Haj pilgrims eligible for Government subsidy. Thus this year, 1,10,000 pilgrims would be eligible for subsidy.
- Supreme Court dismisses the bail application by Pappu Yadav, Member of Parliament from Bihar, accused in the case of murder of CPI (M) activist Ajit Sarkar.

NOVEMBER 17

- The Rajinder Sachar committee says that Muslim community is lagging behind other religious groups in development indicators and asks the Government to frame appropriate programmes to address its educational and economic backwardness. The committee presented its report to Prime Minister Manmohan Singh.
- Prime Minister Manmohan Singh says the Government intended to bring in a Public Services Bill before Parliament to protect whistle blowers and to define a code of ethics and management.
- Supreme Court asks the Centre to formulate guidelines to regulate placing of advertisements in newspapers by Government departments on the occasion of birthdays of political leaders.

NOVEMBER 18

- Prime Minister Manmohan Singh expresses concern over the increasing terrorist violence in southern and south-eastern Afghanistan. It not only undermined the security of the country but hindered the ongoing development effort as well, he says.

NOVEMBER 19

- Prithvi-III, India's surface-to-surface medium range missile is successfully test fired from Chandipur-on-sea.
- A naval officer, Vijay Shankar is selected to head the Strategic Forces Command, set up to manage the country's nuclear delivery assets.
- China expresses guarded support to India's quest for civil nuclear energy and rejects perceptions that the growing relations between New Delhi and the US were aimed at containing it.

NOVEMBER 20

- Chinese President Hu Jintao arrives New Delhi on a four-day state visit as part of expanding leadership level contacts between the two countries.
- The Indian Institutes of Technology (IITs) will implement the first phase of reservation for the Other Backward Classes (OBCs) from the 2007-08 academic session.
- Government announces the streamlining of visa guidelines for Chinese businessmen and professionals.
- An Indian Air Force team of powered hang gliders set a new record of flying 3,700 km in the longest-ever expedition of powered hang gliding, breaking the previous national record of 3,200 km.

NOVEMBER 21

- Prime Minister Manmohan Singh and Chinese President Hu Jintao agree that an early settlement of the boundary question will advance the basic interest of the two countries, and it should be pursued as a strategic objective. The two sides agree to promote co-operation in nuclear energy, consistent with their international commitments. Overall 13 agreements are signed between the two countries.
- India and China decide to explore the possibility of opening new routes for the Kailash Manasarover yatra and trade.
- A divorced woman is entitled to the custody of a minor child even after remarriage, notwithstanding the fact that the father is the natural guardian of the child under the Hindu law, the Supreme Court holds.

NOVEMBER 22

- Parliament pays homage to BSP founder Kanshi Ram and nine other members who passed away recently, before adjourning for the day.
- India and China agree on the need for sending to the world an "important political message" - the two countries are "true friends and partners,' and committed to pursuing a long-term friendship and "working closely" for common development.

- The UPA unanimously decides that the much-discussed Women's Reservation Bill would be introduced in the current session of Parliament.

NOVEMBER 23

- Supreme Court gives relief to about 18,500 traders and professionals, allowing them to operate in residential areas in the Capital. They are among those who have given an undertaking to stop misuse of their premises and are also covered by two Government notifications allowing continuance of commercial activity in certain categories of residential colonies, roads and streets.
- Cabinet committee on Economic Affairs approves initial public offers of there power sector PSUs - the Power Finance Corporation, the Power Grid Corporation of India and the Rural Electrification Corporation.
- 37th International Film Festival of India begins in Panaji, Goa. Actor-director Shashi Kapoor inaugurates the festival that will feature more than 200 films.

NOVEMBER 24

- Government asserts that Arunachal Pradesh being an integral part of India is not debatable, pointing out that there is already a parliamentary resolution on the subject.
- Supreme Court dismisses a PIL petition seeking exemption from the creamy layer rule within the OBCs for persons engaged in hereditary occupation, saying it would go against the quota policy.

NOVEMBER 25

- Prime Minister Manmohan Singh asserts the Government's commitment to zero tolerance of terrorism within the framework of laws.

NOVEMBER 26

- lnaugurating the three-day first Asian Mayors' conference in Dehra Dun, Sri Lankan President Mahinda Rajapaksa urges participants to develop models of excellence where every individual in a town became part of a movement to make it a place worth living.
- Rajnath Singh is re-elected BJP President for a full term until 2008.
- The All India Muslim Shia Law Board announces to give Shia women the right to divorce and make marriage a legal contract that would be enforceable in a court of law.

NOVEMBER 27

- India acquires the capability of air defence against ballistic missiles when it launched two missiles, with one intercepting the other, from two ranges off the Orissa coast.
- Visiting Foreign Minister of Pakistan Khurshid Mahmud Kasuri says that India-Pakistan relations are very important and the two sides needed to develop a level of trust.
- Supreme Court clears the decks for the filing of a chargesheet against BSP chief Mayawati in the Taj Heritage Corridor case.
- Union Minister for Coal Shibu Soren, Prime accused in the case of murder of

his former private secretary Shashinath Jha, and four others were held guilty by a CBI special court in Delhi. Immediately after his conviction, Soren submits his resignation to Prime Minister.

- The TADA court in Mumbai convicts film actor Sanjay Dutt under the Indian Arms Act in the 1993 Mumbai bomb blasts case. Bur it absolved him of conspiracy charges and terrorism under the TADA.

NOVEMBER 28

- Union Minister for Coal Shibu Soren, prime accused in the case of muder of his former private secretary Shashinath Jha, and four others were held guilty by a CBI special court in Delhi. Immediately after his conviction, Soren submits his resignation to Prime Minister.
- The TADA court in Mumbai convicts film actor Sanay Dutt under the Indian Arms Act in the 1993 Mumbai bomb blasts case. But it absolved him of conspiracy charges and terrorism under the TADA.

NOVEMBER 29

- The Government reduces the retail prices of petrol by Rs. 2 per litre and of diesel by Re. 1 per litre with immediate effect.
- Left leaders call for the tabling of the Scheduled Tribes (Recognition of Forest Rights) Bill 2005 in the current session of Parliament along with the amendments proposed by Joint Parliamentary Committee.
- Alok Mehta, Editor of Outlook Saptahik is elected the president of Editors Guild of India.

NOVEMBER 30

- Former captain Sourav Ganguly is recalled to the Indian cricket Test team for the three-match series in South Africa scheduled to begin on December 15.
- Violent protest by Dalits in Maharashtra, over the desecration of an Ambedkar statue in Kanpur, left four persons dead and many injured.
- Report of the Rajender Sachar Committee on the status of Muslims is tabled in the Lok Sabha. To redress the condition of acute deprivation of Muslims, the panel suggests reservation in employment and educational institutions for the backward among them.
- Fuelled by a double-digit growth in manufacturing and services, the Indian economy grew by 9.2 per cent during July to September.

DECEMBER 1

- In an attempt to address the long-standing demand of the people of Manipur and other north-eastern States for the withdrawal of the Armed Forces (Special Powers) Act, the Union Government finally decides to amend the controversial law and remove its most draconian provisions.
- The Punjab and Haryana High Court convicts BJP MP and former cricketer Navjot Singh Sidhu of causing the death of a middle-aged man in a road rage in Patiala in 1988. The quantum of punishment will be pronounced on December 6.
- President A.P.J. Abdul Kalam asks the Government to bring in robust and

effective legislation to prevent discrimination against AIDS patients within the next six months.

- The number of women being newly infected with HIV in India is steadily on the rise, according to World Health Organization. Almost 38 per cent of all Indians living with HIV now are women.

DECEMBER 2

- At least 37 passengers, including 15 women and two children, were killed and 50 injured when a condemned road over-bridge collapsed on the Howrah-Jamalpur Express passing near the Bhagalpur station in Bihar.
- Union Panchayati Raj Ministry prepares a software to maintain database of bank accounts of all Panchayati Raj Institutions to facilitate the transfer of funds through banking channels, preferably electronically.

DECEMBER 3

- A Chinese film The Old Barer wins the Golden Peacock Award at the 37th International Film Festival of India that concludes in Goa.

DECEMBER 4

- Exactly 100 of the 123 accused in the 1993 Mumbai serial blasts case are convicted on various counts. The case now moves into the sentencing phase. Sentences will be awarded after December 11.
- Grandmaster Koneru Humpy wins the gold medal in the women's rapid chess event at the Asian Games in Doha.
- President A.P.J. Abdul Kalam calls upon the atomic energy establishment to start working on plans to increase nuclear power capacity to 50,000 mw by 2030 so that the country could attain energy independence.

DECEMBER 5

- A Delhi court awards life imprisonment to the former Union Coal Minister and chief of Jharkhand Mukti Morcha, Shibu Soren, and four others in the Shashinath Jha, his private secretary, murder case.
- Bombay Stock Exchange's benchmark stock index Sensex hit another landmark crossing 14,000 for the first time.
- A bill to alter the name of Uttaranchal to Uttarakhand is adopted by the Lok Sabha.
- Pankaj Advani wins India's second gold in Billiards at the 15th Asian Games in Doha.

DECEMBER 6

- In a significant ruling, the Supreme Court says that public servants can be prosecuted without the mandatory Government sanction for criminal acts, including corruption. This will apply even to chief ministers, ministers and MPs who face such charges.
- A Division Bench of the Punjab and Haryana High Court awards cricketer turned politician Navjot Singh Sidhu three-year imprisonment and a fine of Rs. 1 lakh in a 1988 road rage case.

- Insurance Regulatory and Development Authority notifies the free pricing of several general insurance policies from January 1, 2007.
- India wins the gold medal in Kabaddi at the 15th Asian Games in Doha.

DECEMBER 7

- Union Cabinet rejects the recommendations of a Parliamentary Standing Committee to exclude creamy layer from the purview of the 27 per cent OBC quota in Government aided institutions of higher learning.
- The Congress wins five out of 11 Assembly seats and one of the two Lok Sabha constituencies in the by-elections held on December 4.

DECEMBER 8

- Shooter Jaspal Rana wins two more gold medals in the 15th Asian Games in Doha.
- Reserve Bank of India notifies a rise in the Cash Reserve Ratio of commercial banks to check inflation.
- Prime Minister Manmohan Singh unveils a statue of Murasoli Maran, former union Minister and leader of Dravida Munnetra Kazhagam, in the Parliament complex.
- Lok Sabha passes the Indian Telegraph (Amendment) Bill, 2006 that will give subsidy to cellular mobile service providers for setting up infrastructure in rural and remote areas.

DECEMBER 9

- National Development Council approves the Approach Paper for the 11th Plan (2002-12), seeking to achieve a nine per cent growth, besides giving topmost priority to agriculture.
- Prime Minister Manmohan Singh says innovative plans would have to be devised for the minorities, particularly Muslims, to empower them to share equitably the fruits of development.

DECEMBER 10

- Anju Bobby George claims the silver medal in the women's long jump event at the 15th Asian Games in Doha.
- Vidhu Vinod Chopra's Lage Raho Munnabhai bags the Best Film award at the second Global Indian Film Award in Kuala Lumpur.

DECEMBER 11

- The Delhi International Airport Limited awards the contract for design and construction of the new terminal and runway to Larsen and Toubro in a deal valued at about Rs. 5400 crore.
- Supreme Court says it is up to the Parliament to decide if speakers have the authority to disqualify MPs and MLAs due to defection.

DECEMBER 12

- Responding to the concerns raised by the opposition parties and its left allies over the US law on the civilian nuclear deal, the Government says it had taken note of certain extraneous and prescriptive provisions in the legislation.

- Prime Minister Manmohan Singh assures the Atomic Energy Commission that "nothing would be done behind your back" in so far as the India-US nuclear deal is concerned.
- Nudity per se is not obscenity. While considering whether a picture is obscene or not, it is essential to determine first the quality and nature of the material published and the category of readers, the Supreme Court says.
- India wins the gold medal in the women's 4*400 m relay event at the 15th Asian Games in Doha.

DECEMBER 13

- Prime Minister Manmohan Singh leaves for a four-day visit to Japan.
- Even as his mercy petition is pending with the President, Mohammad Afzal Guru files a curative petition in the Supreme Court seeking reconsideration of the death sentence awarded to him in the Parliament attack case.
- Leander Paes and Mahesh Bhupathi win the gold medal in the men's double tennis event at the 15th Asian Games in Doha.
- Families of security personnel killed in the terror attack on Parliament five years ago, return the medals the martyrs had been given posthumously.
- The University Grants Commission's dedicated educational channel can now be accessed online. It is the first of its kind to be available on the Internet.

DECEMBER 14

- Lok Sabha unanimously passes the bill to extend 27 per cent reservation for the Other Backward Classes in Central higher education institutions, barring minority establishments and those located in designated tribal areas.
- President A.P.J. Abdul Kalam appoints Lt. Gen. (retd). Bhopinder Singh the Lt. Governor of the Andaman and Nicobar Islands.
- India wins the gold medal in the team classical chess event at the 15th Asian Games in Doha.

DECEMBER 15

- Perhaps for the first time in the history of the Delhi police, a former Assistant Commissioner of Police is awarded capital punishment by a fast track court for torturing a young man to death at the Vivek Vihar police station in East Delhi way back in 1987.
- The Assam Assembly resolves that the Centre be moved by the State Government to effect a change in the name of the State to 'Asom' and suitably make changes in the Constitution as well.
- Lok Sabha adopts the amendments to recognize the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Bill, 2006.
- ONGC exploration team strikes natural gas, which could lead to the country's biggest such find yet. The well's potential is preliminarily estimated at 600 billion cubic metres.

DECEMBER 16

- The former president of BCCI Jagmohan Dalmiya is expelled from the Board for life and removed from all posts on charges of financial irregularities during

his tenure.

- The Information Technology (Amendment) Bill, 2006, to check cyber crimes is introduced in the Lok Sabha by Union Minister of State for Communication Shakeel Ahmad.

DECEMBER 17

- Prime Minister Manmohan Singh outlines five areas - revitalization of rural economy, improved delivery of public services, improved management of urban areas, making our financial system more inclusive along with being globally integrated and putting in place a viable regulatory framework that ensures cost effective investment in infrastructure - that need focused attention over the next 10 years for India to make it to the league of developed nations.
- S. Santhi who won the 800 metres silver medal in the Asian Games fails a gender verification test. Following the confirmation of the test result by a medical panel in Doha, the Olympic Council of Asia decides to withdraw the medal from the Indian contingent.

DECEMBER 18

- A Special CBI court in Patna acquits Railway Minister Lalu Prasad Yadav and his wife and former chief minister Rabri Devi, in the disproportionate assets case.
- Setting aside the trial court judgement this year in February acquitting Siddharth Vashishtha alias Manu Sharma and eight others in the Jessica Lal murder case, the Delhi High Court holds Manu Sharma, Vikas Yadav and Amardeep Singh Gill guilty.
- Parliament approves the Bill providing 27 per cent quota for OBCs in the centrally aided educational institutions with the Rajya Sabha passing it.
- The Government decides to set up two wage boards for journalists and non-journalists under a common Chairman to revise the pay structure of the newspaper industry employees.
- The Telecom Regulatory Authority of India justifies its order to put a cap of Rs. 5 a month on pay channels under the Conditional Access System, which is to be implemented from the New Year.
- Indian Cricket Team defeat host South Africa in the first Test match at Wanderers. This is the country's first Test triumph on South African soil.

DECEMBER 19

- India's polio eradication programme is extremely successful, says Julie Louise Gerberding, Director of the Atlanta based Center for Disease Control and Prevention.
- Lok Sabha passes the Prohibition of Child Marriage Bill, 2006 that seeks to make child marriage null and void. The Bill, passed by Rajya Sabha on December 14, envisages appointment of child marriage prevention officers by States.

DECEMBER 20

- The Delhi High Court sentences Manu Sharma to life imprisonment in the

Jessica Lal murder case. The Court also sentences co-accused Vikas Yadav and Amardeep Singh Gill to four years' rigorous imprisonment.

- Prime Minister Manmohan Singh says if India and Pakistan make an approach with an open and friendly mind then all pending issues between them can be resolved through dialogue.
- The Government announces there will be special packages for Muslims from the pre-school stage to higher education, based on recommendations of the Sachar panel.
- The Karnataka Government imposes a ban on sale of colas in schools and colleges.

DECEMBER 21

- Prime minister Manmohan Singh and US President George W. Bush express happiness over the initiative to change US laws to enable civilian nuclear co-operation between the two countries.
- A Delhi court finds former Congress councillor Sharda Jain and five others guilty of murdering fellow councillor Atma Ram Gupta in August 2002.
- The Cabinet Committee on Economic Affairs agrees to the sale of Government's remaining 10.27 per cent stake in Maruti Udyog Limited.

DECEMBER 22

- President clears the appointment of K.G. Balakrishnan (62), as the 37th Chief Justice of India with effect from January 24, 2007.
- The RBI allows FDI and foreign institutional investment in stock exchanges and depositories up to 49 per cent.
- A Delhi court sentences former councill or Sharda Jain, her brother Raj Kumar Jain, two contract killers and two others to life imprisonment in the councill or Atma Ram Gupta murder case of August 2002.
- Both Houses of Parliament, which concluded the winter session, are prorogued.

DECEMBER 23

- Decks are cleared for the construction of two indigenous Pressurized Heavy Water Reactors of 700 Mw capacity each at Kakrapar in Gujarat with the Centre giving them the final clearance.
- The Employee's State Insurance Corporation enhances the expenditure on medical benefits from Rs. 900 per insured person every year to Rs. 1000.

DECEMBER 24

- Prime Minister Manmohan Singh says in West Bengal that the Union Government is committed to modernization and expansion of public sector enterprises.
- Dalai Lama says Tibet's interest is to remain a part of China and asks India to play a role in achieving the goal to make the region a 'zone of peace'.

DECEMBER 25

- Government revises guidelines to make the issue of passports easier. It

includes doing away with the requirement of police verification for re-issue of the document.

- Chief Justice of India-designate K.G. Balakrishnan wants the CJI's post to be brought under the ambit of the Judicial Inquiry Bill currently before Parliament.
- The Janata Dal (Secular) national executive revokes the suspension of Karnataka Chief Minister H.D. Kumaraswamy and 39 other MLAs from primary membership. They were suspended earlier this year for forming a coalition Government with the BJP.
- Adultery should be treated as a civil wrong and a breach of trust, and not as a criminal offences, as the law of the land considers it today, the National Commission for Women says in a recent recommendation to the Government.

DECEMBER 26

- P.C. Haldar will be the next head of the Intelligence Bureau, taking over from E.S.I. Narasimhan who retires this month end.
- Wheat is cultivated on 31.22 lakh more hectares this rabi season than last year, according to the Ministry of Agriculture. States have reported wheat sowing on 250.06 lakh hectares compared to 218.84 lakh hectares during the corresponding period last year.
- The Employees' State Insurance Corporation paid pver Rs. 93.13 lakh as unemployment allowance until the end of October under the Rajiv Gandhi Shramik Kalyan Yojana.

DECEMBER 27

- Prime Minister Manmohan Singh says the Government is committed to removing imbalances and inequities in society so that everyone gets an equal share in the country's growth.
- The Election Commission clears Union Minister of State for Commerce Jairam Ramesh in the office of profit controversy.
- The CBI files a charge sheet against three persons including former Samata Party president Jaya Jaitly for allegedly taking a bribe from reporters of the Tehelka portal.

DECEMBER 28

- Trinamool Congress leader Mamata Banerjee ends her hunger strike on the 25th day following a letter from West Bengal Chief Minister Buddhadeb Bhattacharjee inviting her for talks, and Prime minister Manmohan Singh's letter on Singur issue.
- Home Secretary V.K. Duggal says there is no Al Qaida presence in India despite the recent terror attacks that have taken place in the country.

DECEMBER 29

- The skeletal remains of 15 children, who had mysteriously disappeared from Nithari village near Noida's Sector 31 over the past two years, were recovered from a drain in the backyard of a businessman's house.
- Manipur, Punjab and Uttaranchal will go to the polls in February next, announces Election Commission.

DECEMBER 30

- Gujarat Government announces exemption from prohibition laws for people, living in the Special Economic Zones. They carry a liquor card entailing conditions, including a three-year validity period and a fee of Rs. 500.
- India describes the execution of the former Iraqi President, Saddam Hussein, as unfortunate and hoped it would not affect the stability of Iraq.

DECEMBER 31

- The Centre has asked States to undertake a campaign for review of the Below Poverty Line category and Antodaya Anna Yojna lists of beneficiaries to eliminate ghost ration cards.

JANUARY 1

- India will need 1,500 universities to attain a gross enrolment ratio of at least 15 per cent by 2015. This is a key observation made by the National Knowledge Commission in its note to the Prime Minister on higher education.
- New UN Secretary-General Ban Ki-Moon appoints veteran Indian diplomat Vijay Nambiar as his chief of staff and Haitian journalist Michele Montas as his spokesperson.
- India and Pakistan exchange lists of nuclear installations and facilities. The exchanges take place simultaneously through diplomatic channels at New Delhi and Islamabad.

JANUARY 2

- The term of the Liberhan Commission, inquiring into the demolition of the Babri Mosque at Ayodhya, is extended by three more months.
- Bihar Government introduces a five-day working week for its employees.
- Department of Industrial Policy and Promotion asks private organizations, entrepreneurs and companies to list details of SC / ST employees in their annual audit reports for 2006-07. The annual reports of a company would be treated as incomplete if they do not state the number of SC / ST employees in the organization.

JANUARY 3

- The sensex closes at 14,014, above 14,000 points, for the first time in its history.
- Inaugurating the 94th session of the Indian Science Congress, Prime Minister Manmohan Singh indicates a significant increase in the allocation for science and technology.
- The Centre constituted a high-level-committee to investigate the serial killings at Nithai village of Noida in Uttar Pradesh and the possible lapses in tracing the missing children.
- The Government informs the Supreme Court that new guidelines and rules to prevent illegal tapping of telephonic talks are likely to be notified soon.

JANUARY 4

- Uttar Pradesh police forms a special team, headed by an Additional Superintendent of Police, to investigate the serial murders of children at Nithari village in Noida.

- Atomic Energy Commission Chairman Anil Kakodkar tells journalists that the civilian nuclear programme of the country would be independent and there is no question of its losing autonomy on the issue.
- The HRD ministry and National Knowledge Commission recommend that internet facilities should be provided to all students and teachers in India, and all higher educational and research institutions linked by a broadband network.
- President A.P.J. Abdul Kalam gives his assent to the legislation that intends to provide 27 per cent reservation to OBCs in institutions providing higher education including IITs and IIMs.

JANUARY 5

- Uttar Pradesh Chief Minister Mulayam Singh Yadav announces a CBI inquiry into the serial killings at Nithari village in Noida and the murder of Kavita Rani, a lecturer of Chaudhary Charan Singh University in Meerut.
- Supreme Court refuses to stay the Delhi High Court order banning interviews of nursery kids and their parents during the admission process.

JANUARY 6

- No case can be registered against Congress leader Ajit Jogi in the cash-for-MLA scam, as he was a caretaker Chief Minister at that time, according to legal opinion the CBI has received.
- Suspected militants of separatist outfit United Liberation Front of Asom gunned down al least 50 people in strikes at four places in Tinsukia and Dhemaji districts.

JANUARY 7

- Insaugurating the Fifth Pravasi Bharatiya Divas Prime Minister Manmohan Singh says that the time is ripe for overseas Indian communities to invest in India in not just financial terms but also intellectually, socially, culturally and emotionally.
- An e-ticketing initiative is launched to help people book railway tickets at the Bharat Petroleum Corporation Limited outlets.
- The Supreme Court holds that the demand for money by a husband from his in-laws for meeting domestic expenses will not come under the ambit of dowry, warranting criminal prosecution.
- The Government is considering a law under which a web camera connected to a network system will click and record the photograph of every customer visiting cyber cafes across India.

JANUARY 8

- In a meeting of FICCI Prime Minister Manmohan Singh says a new rehabilitation policy for displaced farmers would be finalized over the next three months. It would be more progressive, humane and conducive to the long-term welfare of all stakeholders in our economy.
- India and Bhutan agre to sign an updated version of the 1949 Indo-Bhutan

Friendship Treaty to bring it in conformity with the two neighbours' centemporary relationship.

JANUARY 9

- The Supreme Court-appointed panel to check ragging in educational institutions plans to propose making physical or sexual harassment while ragging a cognizable offence.
- Forcible repossession of financed cars by musclemen will now cost banks and finance firms a whopping Rs. 50,000, holds Delhi State Consumer Commission.
- Normality will be restored in Assam in a few days and the culprits behind the heinous crime of killing 62 Bihari Migrant workers will not be spared, says Defence Minister A.K. Antony in Tezpur, Assam.

JANUARY 10

- In a landmark judgement, the Supreme Court upholds Parliament's decision to expel 11 MPs for their involvement in the December 2005 cash-for-query scam.
- In a successful multi-mission, India's Polar Satellite Launch Vehicle (PSLV-C7) takes off from its beachside launch pad at Sriharikota and injects four satellites one after another into precise orbit. Two satellites belong to India and two are from abroad.
- The New York Stock Exchange enters India by inking a deal to pick up 20 per cent stake in the National Stock Exchange.

JANUARY 11

- In a significant judgement, a nine-judge Bench of the Supreme Court holds that there could not be any blanket immunity from judicial review of laws inserted in the Ninth Schedule of Constitution.
- Indian criminals and terrorists will no longer find it easy to take shelter in portugal with the two countries signing an extradition treaty.
- Government lifts the ban on sugar exports with immediate effect in anticipation of a high production of 240 lakh tonnes.

JANUARY 12

- The Supreme Court upholds the death sentence awarded to Mohammad Afzal in the December 13, 2001 Parliament attack case.
- The Supreme Court confirms its interim order cancelling several allotments of petrol pumps, LPG and kerosene outlets made during the NDA regime.
- Prime Minister Manmohan Singh says there is a need for a comprehensive reform of the higher education system and asks the National Knowledge Commission to build a consensus on some of its recommendations.

JANUARY 13

- The outgoing Chief Justice of India Y.K. Sabharwal says there is no friction between the legislature and judiciary. "There is only difference of perception but it is healthy for democracy." He also gives full marks to media for being instrumental in spurring the judiciary into action in several important cases.

- The Centre issues notice to television channels for telecasting an offensive video of a man dressed as Mahatma Gandhi.

JANUARY 14

- Justice Konakuppakattil Gopinathan Balakrishnan is sworn in as the 37th Chief Justice of India.

JANUARY 15

- The Government gives go ahead for the Bharti-Wal-Mart retail ventures.
- The Delhi State Consumer Dispute Redressal Commission imposes a fine of Rs. 50 lakh on Airtel and Cellular Operators Association of India for their failure to stop unnerving and unsolicited calls and SMSs by telemarketing and banking companies to mobile users. The Commission also imposes a joint penalty of Rs. 25 lakh on ICICI and American Express Bank for causing immense nuisance by making unsolicited communications.

JANUARY 16

- Government has further liberalized the emigration system by extending the ''Emigration Check Not Required'' status to 173 countries with effect from December 29.
- Prime Minister Manmohan Singh says his Government would not tolerate violence and would ensure the safety of all citizens in Assam using all resources at its command.
- Expressing concern over poor implementation, Prime Minister Manmohan Singh asks all States and Union Territories to set up an institutionalized review process to exclusively deal with the Integrated Child Development Services, after a detailed assessment.

JANUARY 17

- The 15 member Congress Legislature Party in Uttar Pradesh withdraw its support to the Mulayam Singh Government.
- The Supreme Court directs the Centre to take steps to recover about Rs. 50 crore as penal rent arrears from top politicians, bureaucrats and others for unauthorized occupation of official bungalows in Delhi.
- Indian and Chinese officials start a fresh round of talks aimed at working to resolve a decades-old border dispute.
- The Government bans foreign satellite channel AXN till March 15 for showing indecent content.
- India-born Deepa Mehta's controversial 'Water' - the third of her trilogy after 'Earth' and 'Fire' - is shortlisted for the Oscar academy awards in the Best Film category.

JANUARY 18

- Pakistan's new High Commissioner to India Shahid Malik presents his credentials to President A.P.J. Abdul Kalam at the Rashtrapati Bhavan.
- Ashok Chaturvedi will be the new chief of Research and Analysis Wing.
- In the first-ever acquisition of a warship from the US, India takes possession of USS Trenton and renames it INS Jalashwa.

JANUARY 19

- Former Intelligence Bureau chief, E.S.L. Narasimhan is appointed the Governor of Chhattisgarh and senior Congress leader from Kerala K. Sankaranarayanan will be the new Governor in Nagaland.
- Finance Minister P. Chidambaram says the Government would take all steps to contain rising prices, as rise in inflation is indeed a matter of concern. Official data showed that the inflation rate stood at 6.12 per cent for the week ended January 6, the highest in the past two years.

JANUARY 20

- The Central Board of Secondary Education is going to introduce a new curriculum for classes XI and XII beginning this academic year to develop employable skills in financial markets, accounting and business process outsourcing.
- 20 more companies of paramilitary forces are sent to Assam for internal security duties as well as for providing security for the National Games to be held in Guwahati next month.
- The Election Commission directs the Punjab Government to remove Director General of Police S.S. Virk from all election related duties and appoint R.S. Gill from a panel of three names sent to it by the State.

JANUARY 21

- External Affairs Minister Pranab Mukherjee says India and Myanmar have agreed to expedite work on fencing their common border.

JANUARY 22

- India has for the first time successfully brought a space capsule back to earth. Until now, only US, Russia and China had similar expertise in reentry technology. The success also takes the Indian Space Research Organization a step closer to its goal of putting an Indian in space some years from now.
- As per Government plans, Banks may grant educational loans to students from the economically weaker sections planning to enrol in higher education institutions at four per cent interest rate.
- Alarmed by inflation touching a two-year high of 6.12 per cent, the Government reduces customs duty on a host of items such as cement and raw materials
- Despite opposition from the left parties, the Centre announces that it will notify an interim investment pattern for funds collected under the new Pension Scheme. This will enable five per cent of the funds to be invested in stock market.

JANUARY 23

- The Government clears 23 proposals that will bring a total of Rs. 5910.66 crore of foreign investments.
- The Delhi High Court clears the decks for the telecast of the ongoing India-West Indies cricket series on Doordarshan. It will show the match seven minutes after the live telecast on Neo Sports, which has the exclusive telecast rights for cricket matches being played in India till March 2010.

- Ahead of his visit to New Delhi, President Vladimir Putin discloses that Russia will help India directly in the construction of atomic energy facilities, declaring, ''we stand ready to support our Indian friends''.

JANUARY 24

- The Government cut customs duty on edible oils by up to 12.5 per cent and freezes the tariff values at the July 2006 levels as part of continuing measures to check inflation.
- Telecom Regulatory Authority of India announces a reduction in roaming tariff up to 56 per cent, besides abolishing roaming rental charges and surcharges on national roaming services.
- The Health Ministry decides to ban all advertisement of claims to treating incurable or complicated ailments. Punishment is being enhanced for advertising magic cures.
- The Finance Minister flags off a pilot project in Delhi and Patna to disburse income tax refunds through the SBI.

JANUARY 25

- India and Russia sign a Memorandum of intent to add four units to the nuclear power plant under construction at Koodankulam in Tamil Nadu and build an unspecified number of nuclear power reactors at new sites as well. The memorandum is one of the nine signed in the presence of visiting Russian President Vladimir Putin and Prime Minister Manmohan Singh. Mr. Putin will be the Chief Guest at the 58th Republic Day celebrations.
- Fali Nariman (Public Affairs), Khushwant Singh (Literature and Education), P.N. Bhagawati (Public Affairs), and N.N. Vohra (Civil Service) are among the 10 eminent persons conferred the Padma Vibhushan award. Naresh Chandra (Civil Service), Raja Rao (posthumous for Literature and Education). Sudarshan Erinackal Chandy George (Science and Engineering) and V. Krishnamurty (Civil Service), Balu Sankaran (Medicines) and Raja Jesudoss Chelliah (Public Affairs) have also been selected for Padma Vibhushan. Among the 32 eminent persons awarded the Padma Bhushan are Airtel owner Sunil Bharti Mittal, Pepsi Co President Indra Nooyi, Chairman of Suzuki Motors Corporation CO. Suzuki and social worker Mohini Giri. The 79 Padma awardees include golfer Jeev Milkha Singh, educationist Mushiral Hassa, chess player Koneru Humpy, writer Vikram Seth and activist Teesta Setalvad.
- Addressing the nation on the eve of 58th Republic Day, the President A.P.J. Abdul Kalam exhorts the youth to take up politics as a career in large numbers and urges the citizens to pro-actively cast their votes to select candidates with proven performance, with honesty as the focus.

JANUARY 26

- Russian President Vladimir Putin says that he has reached an across-the-board agreement with Prime Minister Manmohan Singh in the fields of nuclear energy and oil and gas.
- Bihar Chief Minister Nitish Kumar launches a coupon system aimed at checking malpractice and encouraging better service at ration shops distributing essentials to below poverty line families.

JANUARY 27

- Noted Hindi litterateur and film writer Kamaleshwar passed away. He was 75.
- Film actor Amitabh Bachchan is conferred the Legion of Honour by French Embassy.

JANUARY 28

- Noted Music director O.P. Nayyar, died of cardiac arrest at his home in Thane. He was 81.

JANUARY 29

- Congress president Sonia Gandhi justifies India's possession of nuclear weapons on the ground of strategic compulsions. It has them on account of the failure to persuade the world to abolish such weapons.
- Former Delhi Chief Minister Madan Lal Khurana joins Uma Bharti's Bharatiya Jan Shakti as its acting president.
- BJP president Rajnath Singh announces his new team, dropping Gujarat Chief Minister Narendra Modi from the party's parliamentary board.

JANUARY 30

- Air Marshal Fali H. Major, Air Officer - Commanding-in-chief, Eastern Air Command, becomes the first helicopter pilot to be named the chief of Indian Air Force. He will succeed Air Chief Marshal S.P. Tyagi.
- Standard & Poor's Rating Services raises India's sovereign credit rating to investment grade.
- Expressing concern over increasing road accidents, the Supreme Court suggests that a national policy be evolved to prevent and reduce traffic fatalities.
- Courses offered by the Indira Gandhi National Open University will be available online from the academic year 2007-08 and those who want to avail themselves of that facility can opt for it at the time of admission.
- Agriculture scientist M.S. Swaminathan will be the honorary chair in Sustainable Development instituted by the IGNOU to strengthen rural community.

JANUARY 31

- The Supreme Court approves the Centre's proposal to provide 22.5 per cent reservation for Scheduled Caste / Scheduled Tribe candidates under the all-India quota in postgraduate admissions to Government medical colleges for 2007-08.
- The economy expands at a faster rate of 9 per cent during 2005-06 largely on the back of a higher output in the farm sector.
- The RBI hikes the repo rate, a key short-term rate, by 25 basis points for taming inflation.
- Tata Steel wins the battle to take over Anglo-Dutch steel maker Corus with a Pound 6.2 billion offer. Tata clinches the deal to buy Corus beating CSN in a fast-paced auction to create the world's fifth largest steel maker.

- Nobel laureate Desmond Tutu in Delhi urges India to help secure the release of Myamnar's pro-democracy leader Aung San Suu Kyi. Accepting the Gandhi Peace Prize 2005 from President A.P.J. Abdul Kalam he dedicates it to the people of South Africa, the victims of Darfur and Ms. Suu Kyi and thanks Mahatma Gandhi and "Mother India" for helping his rainbow nation get freedom from apartheid.

FEBRUARY 1

- Union Home Ministry extends Bangladeshi writer Taslima Nasreen's visa by another six months till August 17, 2007.
- Union Cabinet approves the promulgation of an ordinance that makes it mandatory for the rights holders of sporting events to share advertisement-free live broadcast signals with all Prasar Bharti platforms on a revenue-sharing basis.
- Over 60 per cent voters exercise their franchise in 10 municipal corporations in Maharashtra.
- Concerned at the rising price of milk, fuelling inflation, the Centre bans the export of milk powder till September 30.

FEBRUARY 2

- Concerned over the increase in the retail prices of wheat and atta, the Centre decides to release up to 4 lakh tonnes of wheat in the open market under its Open Market Sale Scheme (domestic) during February and March.
- 36 Indian firms make it to the 2007 Global Services 100 list of the world's best infotech and business process outsourcing (BPO) companies. The USA, with 32 companies, is the second largest contributor in the list - however, over a dozen of these US firms operate largely though BRO office in India.

FEBRUARY 3

- The three-month long budget session of Parliament will start on February 23 and the general budget will be presented on February 28. Lalu Prasad will present the rail budget on Feb. 26

FEBRUARY 4

- Supersonic cruise missile, BrahMos, with an advance capability of sharp manoeuvring, is successfully test-fired from the Integrated Test Range at Chandipur-on-sea.
- Holding that there is no limit to judicial review, Chief Justice of India Justice K.G. Balakrishnan rules out the question of having any compulsory annual declaration of wealth and assets by judges of the apex court and high courts.

FEBRUARY 5

- Seventeen years after it was set up, the Cauvery Water Disputes Tribunal gives its final verdict in the row over sharing river water. Headed by Justice N.P. Singh, the tribunal allocated 418 thousand million cubic feet (tmc ft) of water to Tamil Nadu, 270 tmc ft to Karnataka, 30 tmc ft to Kerala and 7 tmc ft to Puducherry - out of 740 tmc ft of usable water available in a normal year.

- The united Liberation Front of Asom (ULFA) withdraws its call for boycott of the 33rd National Games beginning in Guwahati on February 9.
- All countries should collectively utilize outer space and ensure that it is not weaponised. As space applications are capital-intensive, nations could come together and use aerospace assets for mutual benefit. Defence Minister A.K. Antony says this at a conference of the world's major air forces in New Delhi.

FEBRUARY 6

- The Government scraps the appointment of R.S. Sharma as Chairman and Managing Director of ONGC.
- Prime Minister Manmohan Singh is chosen for the CNN-IBN Indian of the Year award for his all round performance.
- To enable passengers to plan their journey well in advance, the Railways announces that the advance reservation period would be extended from 60 days at present to 90 days on an experimental basis.

FEBRUARY 7

- The Jawaharlal Nehru Award for International Understanding for 2005 and 2006 will be given to human rights and pro-democracy activist Wangari M. Maathai of Kenya and Brazilian President Luiz Nacio Lula da Silva.
- The new Master Plan for Delhi-2021 is notified by the Union Urban Development Ministry paving the way for planned development of the city while providing relief to those who had deviated from the rules in the past and were faced with sealing and demolition.

FEBRUARY 8

- Government is contemplating adopting the new World Health Organization standards on child growth that can help improving India's poor rating on the global child nourishment index.
- Government set into motion the process of disinvestment of small portions of its holdings in three public sector enterprises - the Rural Electrification Corporation Ltd., Power Grid Corporation of India Ltd. and National Hydroelectric Power Corporation.
- About 80 per cent of the electorate cast their votes in the first phase of Manipur Assembly polls.
- The Supreme Court orders the transfer of the Hindi poetess Madhumita Shukla murder case from a Lucknow court to a special court in Dehra Dun, Uttarakhand.
- India and Bhutan renew their nearly six-decade-old treaty by agreeing to enhance economic relations and prevent the use of their territories for activities harmful to each other.

FEBRUARY 9

- The sharp escalation in the prices of food items pushes the inflation up to a two-year high of 6.58 per cent.
- 33rd National Games begins in Guwahati, Assam.
- Foreign Secretary Shivshankar Menon calls for the free movement of ideas,

media persons and media products in the South Asian Association for Regional Cooperation (SAARC) region.

FEBRUARY 10

- Taking cognizance of serious reservations expressed by several leading lawyers, President A.P.J. Abdul Kalam asks the Government to reconsider the appointment of Justice Jagdish Bhalla of the Allahabad High Court as Chief Justice of Kerala High Court.
- India seeks, not an exclusive sphere of influence, but a shared sphere of mutual development and co-operation in South Asia, External Affairs Minister Pranab Mukherjee says at conference of distinguished editors from the region in New Delhi.
- Chief Justice of India K.G. Balakrishnan stresses the need to look at better options and avenues to overcome congestion in courts: lack of adequate manpower and resources and participatory roles; and cost and rigidity of procedure.

FEBRUARY 11

- The Aditya Birla Group's flagship Hindalco Industries enters into a definitive agreement to acquire the Canadian aluminium maker, Novelis, in an all-cash transaction valued at $5.95 billion.
- Britain's Vodafone Group Plc wins the battle for a controlling stake in Hutchison Essar with a bid that values India's fourth-biggest mobile phone company around $19 billion, including debt.
- Nobel laureate Mohammed Yunus in Kolkata backs the acquisition of farmland for industries but says the Government would have to ensure that the process does not hit farmers hard.

FEBRUARY 12

- A neutral expert appointed by World Bank clears the Baglihar hydropower project being built on the Chenab river in Jammu and Kashmir, overruling most of Pakistan's objections to it.
- The Second Administrative Reforms Commission recommends a ban on midterm political re-alignments, and scrapping of the lawmakers' local area development schemes. The recommendations are handed over to the Prime Minister.

FEBRUARY 13

- Supreme Court directs all High Courts to place before it reports on under-trials languishing in mental asylums for years without facing trial.
- Visiting Chinese Foreign Minister Lizhozing tells External Affairs Minister Pranab Mukherjee that Beijing's January 11 anti satellite test was not directed against any country. The 'hotline' between the two Foreign Ministers is now in place.
- An estimated 65.1 percent of the voters exercise their franchise in the Punjab Assembly polls.
- To contain inflation expectations and suck out excess liquidity from the

banking system, Reserve Bank of India hikes the Cash Reserve Ratio by 0.5 per cent in two stages.

FEBRUARY 14

- Cooperation rather than confrontation should govern the approaches to regional and global affairs, the Foreign Ministers of India, China and Russia, Pranab Mukherjee, Li Zhaoxing and Sergei Lavrov, agree at a meeting in New Delhi.
- The Department of Post will launch an international money order service in March. People can get money from selected countries within 48 to 72 hours.
- Three-time Chief Minister of Madhya Pradesh and senior Congress leader S.C. Shukla died in Raipur. He was 82.
- Union Minister of State for Information and Broadcasting M.H. Ambareesh resigns from the Union Council of Ministers and the Lok Sabha in protest against the Cauvery Water Disputes Tribunal's final award.
- Thirteen Bahujan Samaj Party MLAs who switched loyalties from their parent party in Uttar Pradesh to align with the Samajwadi Party in 2003 are held disqualified by the Supreme Court.

FEBRUARY 15

- In a bid to contain the soaring inflation rate, the Government slashes petrol and diesel prices by Rs. 2 and Re. 1 a litre.
- Indian Railways and the ICICI Bank sign a Memorandum of Understanding for extending the sale of e-tickets in 125 cities across the country.

FEBRUARY 16

- Holding the causing of death of three young women in a bus-burning incident near Dharmapuri in Tamil Nadu in February 2000 as the 'rarest of rare' crime, a court in Salem awards capital punishment to three men, all activists of the AIADMK and twenty five others are to undergo rigorous imprisonment for seven years.
- An estimated 5,000 Indian doctors have returned home from April last, a spokesman of the British Association of Physicians of Indian Origin says.

FEBRUARY 17

- India and Pakistan resume the Thar Express service after the rail link was suspended last year following floods in Rajasthan.
- Concerned over rising prices, the Centre sets up a special cell in the Cabinet Secretariat to monitor the situation.
- Market regulator SEBI defers a decision on mandatory grading for IPOs while deciding to set up a committee on derivatives market and frame regulations for investment advisors.

FEBRUARY 18

- The Supreme Court holds that the High Courts should not interfere with the recommendations made by the Departmental Promotion Committee to promote or not to promote a Government employee or in the fixation of seniority.

- The Government plans to open centres where people can abandon unwanted daughters in a bid to tackle the abortion of female fetuses and infanticide.

FEBRUARY 19

- At least 67 people were killed and 50 injured when two firebombs explode in the Attari Special, feeder for Samjhauta Express near Panipat. Most of the dead, including three children, are Pakistani citizens: the first civilians of the country to have died in a terrorist strike on Indian soil.
- The Delhi High court upholds the trial court judgment of 2003 awarding death sentence to former Delhi Pradesh Youth Congress president Sushil Sharma for killing his young wife Naina Sahni, former general secretary of the Mahila Congress Delhi unit, in 1995.
- The Supreme Court stays execution of the death sentence awarded by the Delhi High Court to Santosh Kumar Singh, son of a former IPS officer, in the Priyadarsini Mattoo murder case.
- Prime Minister Manmohan Singh launches the Backward Regions Grant Fund (BRGF) scheme, which will cover 250 backward districts across the country. A sum of Rs. 3,750 crore will be provided for the scheme every year.

FEBRUARY 20

- Pakistani Foreign Minister Khursheed Mehmood Kasuri arrives New Delhi and visits the victims of Delhi-Attari Express train blasts at New Delhi.
- A total lunar eclipse will occur early on March 4 and will be visible all over India. The moon's eclipse will begin from 3 am and enter totality from 4.14 am.
- The National Commission for the Scheduled Castes rejects the demand for reservation for the Dalit Muslims and Christians on the ground that untouchability - the main criterion for reservation for this community - is peculiar to Hindu religion only.

FEBRUARY 21

- India imposes a ban on the 'direct or indirect' export of all items that could contribute to Iran's nuclear fuel enrichment-related, reprocessing or heavy water-related activities as well as development of nuclear weapon delivery systems. This is in 'compliance' with UN Security Council resolutions.
- The Election Commission announces a seven-phase Assembly election schedule for Uttar Pradesh, beginning on April 7 and ending on May 8. Counting of votes in the 403 constituencies, including 89 reserved would be held on May 11.
- India rules out a joint investigation with Pakistan into the fire bombing of Samjhauta Express near Panipat.
- The Samajwadi Party withdraws its support to the Congress-led UPA Government at the Centre.

FEBRUARY 22

- Prime Minister Manmohan Singh writes a letter to the States stressing the need to implement de-hoarding measures to check price rise.
- The Cabinet approves the maintenance and Welfare of Parents and Senior Citizens Bill, 2006, providing legal sanctity to the rights of elderly.

- The Supreme Court holds that mental cruelty, continuous harassment and threat of prosecution of a husband by his wife would be a ground to grant divorce to the husband.
- The Cabinet approves the phasing out of central sales tax by a one percentage point starting from April 1, paving the way for a roll out of a nationwide uniform goods and services tax regime.

FEBRUARY 23

- Eighty per cent polling is recorded in the third and final phase of the Manipur Assembly elections.
- The Supreme Court reiterates the Mandal Commission's ruling that the creamy layer from among the reserved categories should be excluded from the benefit of reservation to backward classes.
- "My Government is building a new architecture of inclusive growth" says President Abdul Kalam in the traditional address to a joint sitting of the two Houses of Parliament at the beginning of the budget session.
- Interpol in Argentina detains Ottavio Quattrochi, an accused in the Bofors payoff case. He was transiting from a provincial airport to Buenos Aires, according to information recieved by the CBI.
- Well-known literary critic and former editor of The Times of India, Sham Lal, passed away in New Delhi. He was 95.

FEBRUARY 24

- The BSP chief Mayawati announces that her party will seek a fresh mandate from the people after all the 67 BSP legislators, along with the 11 MLAs who had joined the BSP from other parties, resign.

FEBRUARY 25

- To check infiltration of terrorists and smuggling of arms and narcotics, border outposts of paramilitary forces will soon be connected with high-resolution CCTVs.
- Cracking the Class X science and mathmatics question paper will be easier this year with the CBSE promising more objective type questions.

FEBRUARY 26

- Railway Minister Lalu Prasad presents Railway Budget for 2007-08 in Parliament. The highlights of the budget are -
• 32 new trains introduced.
• Across-the-board fare cut from 2 to 8% in peak, lean season.
• 8 AC Garib Rath introduced.
• Dedicated freight corridor to be set up at a cost of Rs. 30,000 crore.
• Largest-ever annual plan outlay of Rs. 31,000 crore for 2007-08.
- The new number of railway enquiry will be 139.

FEBRUARY 27

- The Congress is voted out of power in Punjab and Uttarakhand as Akali-BJP alliance and BJP win the states assembly polls respectively. Congress manages to stay in office in Manipur with support from its allies.

- Concernedover rising prices, the Economic Survey 2006-07 prescribes measured steps to check the inflationary spiral, even while advocating the need for care to sustain the high growth trajectory of the conomy.

FEBRUARY 28

- Finance Minister P. Chidambaram presents Union Budget for 2007-08 in Parliament. Highlights of the Budget are -
- • No change in personal, corporate, service tax rate.
- • Income Tax exemption limit hiked by Rs. 10,000 to 1.1 lakh; to Rs. 1.45 lakh for women; to Rs. 1.95 lakh for senior citizens.
- • Education cess on all taxes hiked from 2% to 3%.
- • Service tax exemption limit doubled to Rs 8 lakh.
- • Allocation for Defence increased to Rs. 96,000 crore.
- • 5 lakh classrooms to be built and 2 lakh teachers to be appointed.
- • Rs. 750 crore for National Scholarship Scheme.
- • 1 lakh scholarships for class 9-12 students.
- • Rs. 7,324 crore for mid-day meal scheme.
- • Outlay for health increased by 21.9%.
- • Rs. 1,290 crore for the elimination of polio.
- • Allocation for ICDS to be increased to Rs. 4,761 crore.
- • Allocation for HIV / AIDS hiked to Rs. 969 crore.
- • Credit target for 2007-08 at Rs. 2,25,000 crore in Agriculture sector.
- • 1 lakh jobs to be created for physically challenged.
- • National Rural Employment Guarantee Scheme in 330 districts.
- • Allocation for SCs / STs increased to Rs. 3,271 crore.
- • Rs. 8,795 crore for women-specific programmes.
- • Rs. 550 crore for Commonwealth wealth games.

MARCH 1

- A Supreme Court Bench of Justices A.R. Lakshmanan and Altams Kabir orders the CBI to start a preliminary enquiry against Uttar Pradesh Chief Minister Mulayam Singh Yadav, his son and daughter-in-law over allegations of amassing assets disproportionate to their known sources of income.
- The Union Cabinet formally approves the creation of single mega airline by the merger of the two state owned airlines - Air India and Indian Airlines.
- B.C. Khanduri is elected leader of the BJP legislature party in Dehra Dun.
- Manipur Governor S.S. Sidhu invites Congress legislature party leader Okram Ibobi Singh to form new government. This is Ibobi's second term.
- S.I.S. Ahmed, a 1970 batch IPS officer takes over as DG-CRPF.
- An Army Court, for the first time in independent India, sentences a jawan to death for killing an officer following an altercation.
- Stray dogs maul a 4-year-old child, Manjunath to death in Bangalore.
- All the seven accused of sedition in the Tigers of Sikh Land case of July 1998

are acquitted by District Additional and Sessions Judge Hardip Singh in Punjab.

MARCH 2

- The Centre notifies new rules under the Indian Telegraph Act, according to which no phone can be tapped without the approval of the Union or a State Home Secretary.
- National Security Guards (NSG) to provide cover for Indian Criket Team during the ICC Cricket World Cup 2007.
- Punjab Governor S.F. Rodrigues administers the oath of office and secrecy to new Chief Minister, Prakash Singh Badal and 17 ministers at the Mohali Stadium.
- Ibobi Singh is sworn in as Chief Minister of Manipur.
- B.C. Khanduri is invited to form Government in Uttarakhand.
- Sabyasachi Bhattacharya, former Vice-Chancellor of Visva-Bharati University (Santiniketan), is appointed as Chairman of the Indian Council of Historical Research.
- The Central government inks production sharing contracts with successful bidders of the 52 oil and gas blocks that were auctioned under the sixth round of the New Exploration Licensing Policy (NELP).

MARCH 3

- Prime Minister Manmohan Singh rules out troops reduction in J&K as of now.

APRIL 1

- India is receptive to the idea of co-ordinate patrolling of the Palk Strait, Sri Lanka Foreign Minister Rohitha Bogollagama says after meeting with External Affairs Minister Pranab Mukherjee in New Delhi.
- Central Information Commission rules that Indian Missions abroad come under the purview of the Right to Information Act, thus enabling the 50 lakh NRIs to make use of it too.
- The Government continues to deliberate on ways to get the Supreme Court stay on reservation for OBCs in elite educational institutions vacated.

APRIL 2

- India proposes that the South Asian Association for Regional Co-operation (SAARC) nations adopt a legal assistance treaty to fight terror effectively, Foreign Secretary Shivshankar Menon tells after a meeting of the grouping's council of (Foreign) Ministers.
- Bombay Stock Exchange (BSE) 30-share Sensitive index (Sensex) dips by 617 points. This is the second biggest single-day fall for the Sensex ever.
- Hinting at removal of irritants to free movement of media persons and products across South Asia, External Affairs Minister Pranab Mukherjee says, unilaterally, India will further liberalise its visa restrictions.
- Foreign Ministers from the SAARC have decided that 50 journalists from every SAARC country would be issued a "visa sticker" to facilitate travel within the region.

APRIL 3

- Setting the tone for the 14th South Asian Association for Regional Co-operation (SAARC) summit, Prime Minister Manmohan Singh says India would allow "zero-duty access" for goods from Bangladesh, Afghanistan, Nepal, Maldives and Bhutan before the end of the year and "further reduce" the sensitive lists in respect of these countries.
- Pakistan Prime Minister Shaukat Aziz acknowledges that Islamabad and New Delhi have managed to reduce some of the "trust deficit" between them, resulting in more interaction and movement of people and goods than five years ago.
- Zee Telefilms announces a parallel cricket league in the country. Kerry Packer has done a similar thing to revolutionize the game worldwide. Essel Group chairman Subhash Chandra announces this in New Delhi.
- The Centre tells the Supreme Court there is no 'convention' that 'tainted' ministers should resign.

APRIL 4

- India and Pakistan will press ahead with a proposed gas pipeline from Iran, an official Pakistani statement says after talks between Prime Ministers Manmohan Singh and Shaukat Aziz.
- Board of Control for Cricket in India president Sharad Pawar confirms receiving Greg Chappell's resignation as coach of the Indian team and says his contract with the BCCI is over.
- The Bharatiya Janata Party withdraws within a day of release a controversial campaign CD meant for distribution in election-bound Uttar Pradesh.
- With Pakistani Prime Minister Shaukat Aziz offering to sell cement to India, and regional leaders agreeing to make progress on issues of water, energy, food and environment, the 14th SAARC summit ends. The next summit will be held in Maldives.
- The Centre upholds the Supreme Court's jurisdiction to order CBI inquiry into a matter without obtaining consent from the concerned State Government.

APRIL 5

- The Allahabad High Court rules that Muslims in Uttar Pradesh could no longer be treated as a religious minority.
- Tejendra Khanna is appointed Lieutenant Governor of the National Capital Territory of Delhi, replacing B.L. Joshi who has been shifted to Meghalaya.
- Elections to the Municipal Corporation of Delhi register a modest turnout of just about 43 per cent.
- The Election Commission issues a notice to the BJP to show cause as to why it should not be de-recognised as per the provisions of the Election Symbols (reservation & Allotment) Order, 1968, for violating the Model Code of Conduct by distributing a CD, containing inflammatory campaign material, in Uttar Pradesh.

APRIL 6

- A division bench of the Allahabad High Court stays the judgement of a single-judge bench passed a day earlier, which said Muslims are no longer a religious minority in Uttar Pradesh.
- Taking a strong view of the controversial CD produced by the Uttar Pradesh unit of BJP, the Election Commission lodges an FIR against national president of the party Rajnath Singh and leader of opposition in the State Assembly Lalji Tandon.
- Former India skipper Ravi Shastri is offered the post of India's cricket manager for the forthcoming tour of Bangladesh.

APRIL 7

- The Bhartiya Janata Party wrested the Municipal Corporation of Delhi from the Congress winning 164 of the 272 wards.
- About 46 per cent of the 1.61 crore voters turn out to exercise their franchise in the first phase of the Assembly elections in Uttar Pradesh.
- The former Indian captain, Ravi Shastri is named Cricket Manager for India's forthcoming tour of Bangladesh. Rahul Dravid retained captain for India's three series, in Bangladesh, Ireland and England. Venkatesh Prasad and Robin Singh, both former Indian cricketers are named bowling and fielding coaches respectively for the tour of Bangladesh.
- External Affairs Minister Pranab Mukherjee is seriously injured when his car was involved in head-on-collision with a truck in West Bengal's Nadia district.

APRIL 8

- Mumbai girl Sarah Jane Dias is crowned 'Miss India World', Puja Gupta 'Miss India Universe' and Puja Chitgopekar 'Miss India Earth'.
- Expressing serious concern over judicial interventions, Prime Minister Manmohan Singh says that in the guise of Justice Judiciary must not over-reach itself.

APRIL 9

- The first National Study on Child Abuse, covering 13 states and a sample size of 12,446 children and released by Minister for Women and Child Development Renuka Chowdhury, says that one out of every two children in the country has experienced sexual abuse and two out of every three children have been physically abused.
- Arunachal Pradesh Power Minister Dorjee Khandu is sworn in Chief Minister after Gegong Apang quit the post ending a 10-day -long political crisis, which was sparked by dissidence within the ruling Congress.
- The Centre constitutes a committee for an appraisal of the recurring deaths of lions in and around the Gir National Park in Gujarat.
- The Government clears sale of six per cent equity in the National Stock Exchange (NSE) to foreign investors while approving 13 Foreign Direct Investment (FDI) proposals amounting to Rs. 477 crore.

APRIL 10

- M.S. Swaminathan, father of the Green Revolution and Kapila Vatsayayan, writer and scholar of Indian Arts and creative thinker, are nominated to the Rajya Sabha.
- Justice B.J. Sethna of the Gujarat High Court, under orders of transfer to the Sikkim High Court, resigns from the judicial service.
- In a major step towards his detention and extradition to India, a district court in the United Kingdom issues a warrant of arrest against Ravi Shankaran, one of the main accused in the Naval War Room leak case.

APRIL 11

- After two weeks of consultations with allies, the opposition and within UPA - presided by the PMO - the Government decides to approach the Supreme Court to ask for a vacation of its stay order on the 27 per cent OBC quotas in higher education.

APRIL 12

- Nuclear capable long-range ballistic missile Agni-III is successfully test-fired, signalling India's entry into a select group of nations that have the ability to hit targets 3,500 km away with accuracy and precision.
- The Government formally approves New Delhi's bid for hosting the 2014 Asian Games and expressed its commitment to make it the best-ever Games, if it won the bid.
- Concerned at the continuing high prices of pulses, the Centre decide to import 1.5 million tonnes of a variety of pulses through public sector agencies to stabilise prices.
- Ending months of acrimony and legal disputes, Jet Airways strikes a deal to buy out Air Sahara for Rs. 1450 crore after clearance by a three-member arbitration panel.

APRIL 13

- About 46 per cent polling is recorded in the second phase of the Uttar Pradesh Assembly elections.
- After remaining above the worrisome six per cent mark for over two months, the rate of inflation declined to 5.74 per cent for the week ending March 31.

APRIL 14

- Former Delhi Chief Minister Madan Lal Khurana resigns from expelled BJP leader Uma Bharti's Bhartiya Jan Shakti party and declares that he would soon float a new party of his own that would work for development of Delhi and strive to get it the status of a full State.

APRIL 15

- The head of moderate faction of the Hurriyat Conference, Miewaiz Umar Farooq rejects Chief Minister Ghulam Nabi Azad's appeal to take part in the third round table conference scheduled to be held in New Delhi on April 24.

APRIL 16

- The Centre files an application in the Supreme Court for vacating the interim stay on implementation of 27 per cent reservation for OBCs in elite educational institutions.
- The Supreme Court decides to examine whether a citizen of India, not by birth but by citizenship acquired by naturalization, could hold constitutional posts / public offices.

APRIL 17

- The Delhi High Court directs the Union Public Service Commission to disclose to candidates the cut-off marks in the 2006 preliminary Civil Services examinations and also the model answer papers.
- Reserve Bank of India makes it mandatory for customers to open their lockers at least once a year, failing which they are liable to be broken open.

APRIL 18

- BJP MP Babu Bhai Katara from Gujarat is arrested at the Indira Gandhi International Airport on the charge of trying to take a woman and a teenaged boy to Canada on the passports of his wife and son.
- In the third phase of Assembly election in Uttar Pradesh around 51 per cent voter turnout is recorded in 57 constituencies in the ten districts.
- The Supreme Court holds that a wrong judgement or wrong interpretation of law by a judicial officer in a case cannot be a ground for initiating disciplinary proceedings or awarding punishment to the judicial officer.

APRIL 19

- Union Finance Minister P. Chidambram directs public sector banks to moderate the growth of credit to high-risk sectors such as commercial real estate and capital markets while holding the lending rates on home loans up to Rs. 10 lakh to protect the interests of this section of borrowers.
- India prohibits trade in arms with Iraq, besides exchange of equipment and technology that can contribute to nuclear programme with North Korea and Iran.

APRIL 20

- Indian Institutes of Management will defer the release of their admission lists till further directions from the Union Human Resources Development Ministry.
- Sachin Tendulkar and Sourav Ganguly are rested for the three-match One Day International series against Bangladesh, while off-spinner Harbhajan Singh, all-rounder Irfan Pathan and paceman Ajit Agarkar are omitted from the ODIs and Tests. Two new players Manoj Tiwari and Piyush Chawla are included for the ODIs.
- With Election Commission seeking proper guidelines on exit / insta polls, the Supreme Court posts a petition, seeking a ban on such exercises, for final hearing after summer vacation.

APRIL 21

- Now, November 19 will be celebrated as International Men's Day. The Save Indian Family Foundation has taken the decision.
- Forensic Science will be taught at Delhi University soon as a three-year undergraduate course.

APRIL 22

- Supersonic cruise missile BrahMos, jointly developed by India and Russia, is successfully test-fired from the Integrated Test Range at Chandipur-on-sea.
- The Centre defends subsidies provided to Muslims for the Haj pilgrimage in the Supreme Court, pushing aside the charge that subsidies are against the principles of secularism.

APRIL 23

- About 46 per cent of the voters exercised their franchise in the polling for the fourth phase of Assembly election in 57 constituencies of Uttar Pradesh.
- The Supreme Court refuses to vacate the interim stay on 27 per cent reservation for OBCs in elite educational institutions.
- The Indian Space Research Organisation successfully makes the first commercial launch of a foreign satellite through the Polar Satellite Launch Vehicle (PSLV-C8). Italian satellite Agile, weighing 352 kg, is place in a precise orbit about 550 km above the earth.

APRIL 24

- Reserve Bank of India makes it easier for banks to lend for individual housing but fixed tighter targets for inflation control and credit growth, in the credit policy unveiled by it.
- The third Kashmir roundtable conference begins in New Delhi with Prime Minister Manmohan Singh saying deployment of security forces is directly related to the extent of militancy.

APRIL 25

- The Cabinet Committee on Political Affairs decides to convene a meeting of all constituents of the UPA and supporting Left parties to evolve a suitable response to the Supreme Court stay on reservation for the OBCs in central higher educational institutions.
- The first security camp set up in the interior city after the onset of militancy in Kashmir is vacated by the forces after 17 years.

APRIL 26

- All constituents of the UPA and the supporting Left Parties agree to the Government's proposal to allow admissions in Central educational institutions, including the IIMs and the IITs as per the 2006-07 intake for the coming academic year.
- Peeved at judiciary donning the role of executive in serveral cases, Lok Sabha Speaker Somnath Chatterjee warns of serious implications if this trend continued.

- India joins the elite club of 12 countries with a trillion dollar economy. The country's GDP crossed the trillion-dollar mark for the first time in history when the rupee appreciated to below the 41-level against the US greenback, Swiss investment bank Credit Suisse says in a report.

APRIL 27

- Ending a three week-long uncertainty, The Indian Institutes of Management and other Central educational institutions are asked to limit their intake for 2007-08 academic year to last year's capacity, pending the final verdict from the Supreme Court on reservation for the OBCs.
- The Government set up a four-member Commission on Centre-State relations headed by the former Chief Justice of India, M.M. Punchhi. It will examine changes that have taken place since the Sarkaria Commission looked into the relations over two decades ago.
- The Foreign Investment Promotion Board approves British telecom giant Vodafone's acquisition of a controlling stake in India's fourth largest mobile operator Hutch Essar Ltd.

APRIL 28

- Union Home Minister Shivraj Patil refutes the opposition charge that the UPA Government is soft on terrorism, saying it is taking a balanced and humane approach.
- An estimated 46 per cent of the electorate exercises their franchise in the fifth phase of UP Assembly elections.

APRIL 29

- Communist Party of India (Marxist) rules out withdrawal of support to the UPA Government at the Centre, even as it plans to work for a 'third alternative' on the basis of a common platform.

APRIL 30

- Bollywood legend Dilip Kumar is conferred the Phalke Ratna Award.
- The Norwegian Government intervenes in the high-profile case filed by Novartis, and asks it to withdraw the case it has filed against Indian patent laws.
- Mohammad Afzal, sentenced to death for plotting an attack on Parliament in 2001, withdraws his petition seeking to end his solitary confinement in Tihar Jail.
- Travel agent Mohd. Mazharuddin Ali alias Rasheed, arrested in Hyderabad in connection with the human trafficking case involving suspended BJP MP Babubhai Katara, says four members of Parliament, a former MP, two MLAs and a former minister were involved in the racket.
- Congress leader Sonia Gandhi is among a packed and varied field chosen by Time magazine for this year's list of the world's 100 most influential people.
- The Centre asserts that the Supreme Court is not a super Planning Commission to give directions to the Government on policy issues, particularly on future demand and supply position of power in the Capital.

MAY 1

- The Director General of Civil Aviation makes it mandatory for all airlines to allot passenger seat and row numbers, in a measure that would help tackle overbooking by airlines, especially low-cost carriers.
- The US State Department says Pakistan-based terrorist group Jaish-e-Mohammad is making money off commodity exchanges and real estate to fund its terror activities. The annual Countries Reports on Terrorism 2006 voices suspicion that the JeM received funding from al-Qaeda.

MAY 2

- After two rounds of meetings in Washington, D.C., between Foreign Secretary Shivshankar Menon and Under Secretary of State Nicholas Burns, India and the US publicly claimed that considerable progress had been made in the crucial '123 agreement' on bilateral civil nuclear co-operation.
- Contending that it is a pioneer in providing reservation for over 85 years and is vitally interested in the outcome of OBC case, Tamil Nadu files an application in the Supreme Court supporting the Centre's law to provide 27 per cent quota for the OBCs in elite educational institutions.

MAY 3

- The Centre justifies the enactment of the 93rd Constitution Amendment, introducing clause 15 (5) in Article 15, to facilitate framing of laws to provide quotas for socially and educationally backward sections.
- About 45 per cent of the 1.57 crore electorate vote in the sixth phase of Assembly elections in Uttar Pradesh.
- Individual tax payers will not be required to attach Form 16 certificate of tax deducted at source as the new forms (ITR series) for filing income tax returns are to be submitted without any annexure from the current assessment year.

MAY 4

- The Election Commission asks the BJP to openly condemn the contents of the CD distributed on the eve of the Assembly polls in Uttar Pradesh, to remove misgivings among the people that the party was responsible for its release.
- Supreme Court tells the Government to place before it the Cabinet advice to the President on the petition for removal of Election Commissioner Navin Chawla.
- A Siwan court awards life imprisonment to Rashtriya Janata Dal MP Mohammad Shahabuddin in a 1999 abduction case.
- Over 45 per cent of the electorate exercise their franchise in the seventh and final phase of Uttar Pradesh Assembly elections.

MAY 5

- Ruling out troop reduction in Kashmir, Defence Minister A.K. Antony says that Islamabad must validate the ground positions of Indian and Pakistani troops on the Siachen glacier before any forward movement could be made on the Kashmir issue.

- Chief Election Commissioner N. Gopalaswami justifies the seven-phase elections for the Uttar Pradesh Assembly, saying it ensured free and fair polls.

MAY 6

- The Supreme Court rules that the Government has the power to ban or forfeit any publication that endangers public order even if it means restricting the freedom of expression guaranteed by the Constitution.
- The world's largest aircraft Airbus A380 makes it maiden landing in India at Indira Gandhi International Airport as part of a publicity programme.

MAY 7

- The Supreme Court stays the death sentence on the former Youth Congress leader Sushil Sharma, convicted in the sensational Naina Sahni murder case and admits his appeal seeking a quash of the conviction.
- US President George W Bush rings Prime Minister Manmohan Singh to give a push to bilateral civilian nuclear agreement ahead of the visit of US Undersecretary of State Nicholas Burns.

MAY 8

- Supreme Court stays a Haridwar court order directing Mumbai police to attach the properties of noted painter M F Husain.

MAY 9

- Three people died following violent protests by supporter of M.K. Azhagiri, the eldest son of Tamil Nadu Chief Minister M. Karunanidhi, in Madurai, angered by a survey in Tamil daily Dinakaran that said Karunanidhi's second son M.K. Stalin was most suited to succeed his father as political heir.
- A special TADA court acquits 23 of 123 accused in the 1993 Mumbai serial blasts case. The court will start pronouncing sentences against 100 people convicted in the case on May 18.
- Prime Minister Manmohan Singh files his nomination papers in the Assam Assembly seeking a re-election for a fourth term to the Rajya Sabha. The election is slated for May 24.
- The Supreme Court reserves its order on the Centre's plea to refer to a Constitution Bench the issue of 27 per cent quota for OBC in Central educational institutions.
- The medium range, surface-to-surface missile 'Prithvi' is test fired from the Integrated Test Range at Chandipur-on-sea.

MAY 10

- The historic Central Hall of Parliament comes alive with the collective memories of the nation spread over 150 years as it witnessed the commemoration of the first War of Independence of 1857.
- The Government exits the country's largest car maker Maruti Udyog Ltd. selling its residual stake for Rs. 2,360 crore to a clutch of financial institutions led by the Life Insurance Corporation.
- The law against the trafficking of women will get more teeth as those who exploit women in the name of religious practice or tribal custom will also be termed as offenders.

- Indian Space Research Organisation, which succesfully launched the Italian satellite last month, signs agreements for putting into space three more foreign satellites.

MAY 11

- Mayawati-led Bahujan Samaj Party wins power with a clear majority of 206 seats in the 403-member Uttar Pradesh Assembly. The BSP's simple majority in the elections ends 16 years of unstable coalition regimes in the State marked by frequent defections and change of governments.
- India and Pakistan will hold Secretary-level talks in June on key issues such as terrorism, drug trafficking, trade and water resources.
- Irom Sharmila, the human rights activist who has been on a fast-unto-death for over six years demanding the repeal of the Armed Forces (Special Powers) Act, is granted bail by a Delhi court in a case of attempted suicide.
- Reviving memories of the momentous events that resulted in the revolt of 1857, a spectacular cultural show was presented at the Red Fort to commemorate 150 years of the First War of Independence.

MAY 12

- The first batch of 14 Arjun, Main Battle Tanks, the Defence Research and Development Organisation's flagship weapons system, is delivered to the Army and they are to be put on reliability analysis in Rajasthan deserts this June.
- Teachers appointed to Kendriya Vidyalayas on an ad hoc basis to meet exigencies in an academic year cannot be regularized in service as a matter of right, holds Supreme Court.

MAY 13

- Ms. Mayawati is sworn in an Chief Minister of Uttar Pradesh. A 49-member Ministry, including 19 Ministers of Cabinet rank also assumes office.
- Union Information and Technology and Communication Minister Dayanidhi Maran resigns from the Cabinet. The move follows a resolution passed by his party, the DMK's administrative committee proposing to seek his removal from the Ministry for violating party discipline and bringing it on to disrepute.
- Over 40,000 people killed in Jammu and Kashmir between 1990 and 2006. This includes over 13,000 civilians and 4,000 security forces personnel. Over 18,000 people have been arrested or apprehended in connection with militancy. 170 of the 436 temples that existed in 1989 have been damaged as a result of militancy. These figures have been presented to the Supreme Court in an affidavit filed by the Union Home Ministry in response to public interest petition.

MAY 14

- The Gujarat Government files an action taken report to the Supreme Court stating one of the arrested police officers had given a confessional statement about his role in the killing of Sohrabuddin Sheikh in a fake encounter.
- The South west monsoon is likely to hit Kerala on May 24, seven days earlier than usual.

- Manju Sinha, the wife of Bihar Chief Minister Nitish Kumar passed way in New Delhi after a prolonged illness. She was 55.
- The Indian Cricket League launched by the Essel Group announces that former Indian Captain Kapil Dev would head the league's Executive Board.

MAY 15

- A Raja is appointed the new Communication and Information Technology Minister in place of Dayanidhi Maran, who was forced by the DMK to resign. Consequent to Mr. Raja moving from Ministry of Environment and Forests, another DMK nominee, S. Regupathy, who was Minister of State for Home, has taken Mr. Raja's place, though only as Minister of State. From now the Prime Minister will look after Environment and Forests.
- The Government says the Conditional Access System would cover Mumbai, Delhi and Kolkata by January 2008.
- India and US enter into the final lap of negotiations next week on the agreement to operationalise the civil nuclear deal with New Delhi

MAY 16

- India warns the United States of an adverse impact on World Trade Organisation negotiations if it makes any attempt to restrict the movement of skilled professionals of India information technology companies.
- The Supreme Court orders a crackdown on ragging on campuses across the country. The court makes it compulsory for colleges and other educational Institutions to register FIRs and says exemplary punishment should be awarded to offenders, so that it acts as a deterrent.
- A 11-member committee of Lok Sabha MPs is constituted to inquire into instances of misconduct and misuse of parliamentary privileges and facilities by members.

MAY 17

- Supreme Court refers to a larger bench the issue of 27 per cent quota for OBCs in central higher-education institutions, including IIMs and IITs.
- Prime Minister Manmohan Singh is re-elected unopposed to the Rajya Sabha from Assam for the fourth consecutive term after independent candidate Matang Singh withdrew form the contest.

MAT 18

- A powerful bomb blast killed at least 10 people and injured another 50 at the historic Mecca Masjid, near the Charminar in Hyderabad.
- First-time MP from Tamil Nadu, V Radhika Selvi of the DMK takes over as Minister of State for Home.
- Inflation declines to 5.44 per cent for the week ended May 5 against 5.55 per cent the previous week.

MAY 19

- Girls outpeform boys in Class X and XII examinations conducted by the Council for the Indian School Certificate Examination.

- T.K.A. Nair, Principal Secretary in Prime Minister's office, is given an extension to continue in office till further order.
- The six-month old transport deadlock between Uttar Pradesh and Delhi ends with resumption of bus services between the States.

MAY 20

- The pension fund regulatory authority says only public sector companies can apply for pension managers under the new pension scheme, and no foreign or private firm would be allowed.

MAY 21

- India signs a ten-year bilateral investment promotion and protection agreement with Mexico to promote flow of investment to both countries and allow free repatriation of funds by investors.
- President A.P.J. Abdul Kalam awards certificates of honour to scholars of the Sanskrit, Pali, Prakrit, Arabic and Persian languages. The Presidential Awards of Certificate of Honour and the Maharshi Badrayab Vyas Samman Awards were presented to 30 recipients for 2006.
- The Chief of the Army Staff General J.J. Singh has his first official round of meetings in the Chinese capital Beijing. He is on a five-day trip to China, the first such visit by the Chairman of the Chiefs of Staff Committee of the Indian Armed Forces.

MAY 22

- The new entity following the merger of state-run carriers Indian and Air India would be called Air India with 'Maharaja' as the mascot.
- Six persons were injured as three serial bomb blasts rocked Gorakhpur in eastern Uttar Pradesh.
- The Coast Guard and Navy will share the task of protecting and enforcing the laws concerning the soon-to-expand Exclusive Economic Zone.
- Prime Minister Manmohan Singh says the objective of his Government is to ensure that while sustaining higher rates of economic growth, the improved performance of the economy contributes to employment generation, poverty reduction and human development.

MAY 23

- The country's tiger population has fallen drastically. Initial estimates from 16 of the country's 28 tiger reserves in 2006-07 indicate a 50 per cent fall in the number of tigers in four central Indian states in the last five years. There are only 490 tigers in the 16 reserves across Madhya Pradesh, Rajasthan, Maharashtra and Chhattisgarh down from 1,233 in 2002. A final census is expected by the end of 2007.
- A Planning Commission working group has recommended 33 per cent reservation for women in all IITs, IIMs, Central Universities and other higher and technical educational institutes. The group also recommends a caste-based census on the basis of which future policies can be framed.
- Prime Minister Manmohan Singh expresses concern over corruption in road construction projects that 'spread like cancer' and emphasizes the need for transparent implementation.

- Octogenarian social activist from Asam Rabindra Nath Upadhyay and Delhi-based Institute for Socialist Education are presented the National Communal Harmony Awards for 2006 by President A.P.J. Abdul Kalam.

MAY 24

- In a strong message to India Inc., Price Minister Manmohan Singh cautions corporates against any form of cartelisation, while noting that efforts to maximize profits should be within the bounds of 'decency and greed' as rising prices severely affected the common man.
- The Chief Justices and Chief Ministers of various States agree to introduce a shift system in the subordinate courts to dispose of appropriate cases, including those relating to petty offences.
- The Government decides to introduce a legislation to provide social security to workers in the unorganized sector on the first day of the monsoon session of the Parliament.
- The Reserve Bank of India decides to permit banks to deliver cash and drafts at the doorsteps of individual customers, corporate customers, government departments and PSUs either against cheques received at the counter or requests received through any secure convenient channel such as phone banking and internet banking.

MAY 25

- The CBSE announces the results for class XII. The national pass percentage is 80.64.
- Visiting Iraqi Oil Minister Hussen al-shahristani calls on Prime Minister Manmohan Singh and seeks India's co-operation in rebuilding his country.
- The two-month long ban on FTV is lifted, six days ahead of schedule, following an apology by the channel.

MAY 26

- The CPI (M) suspends Kerala Chief Minister V.S. Achuthanandan and state unit chief Pinarayi Vijayan from the party Polit Bureau for criticising each other publicly through media.
- India creates a record when its first four batsmen - Wasim Jaffer, Dinesh Karthik, Sachin Tendulkar and Rahul Dravid - scored centuries playing the second Test against Bangladesh in Dhaka.

MAY 27

- The Interpol issues a Red Corner notice against Rahil Abdul Rahmen Sheikh, identified as the principal organizer of the bombings on July 11 last year in Mumbai.
- In Mumbai more than one lakh Dalits and tribal Hindus embrace the Buddhist faith in what is considered the largest mass conversion in the country.
- A sharp surge in share prices of his group companies earns Reliance Industries Chairman Mukesh Ambani a rare distinction of being the only trillioniare in the country with over Rs. 1,00,000-crore of wealth through his shareholdings.

- India beats Bangladesh by an innings and 239 runs with over two days to spare in the second and final Test to win the rain-affected series 1-0 in Dhaka.

MAY 28

- Warning that continued slippages in the power sector could derail the rising economic growth rate Prime Minister Manmohan Singh stresses the need for widespread reforms including curbing theft, launching an aggressive programme for capacity addition, attracting private investment and reducing transmission and distribution losses.
- The Indian Meteorological Department announces the onset of the much-awaited south-west monsoon over Kerala. With this, the monsoon has arrived three days before the normal date of June 1.

MAY 29

- Prime Minister Manmohan Singh announces a Rs. 25,000-crore plan for new farm sector projects by States, besides launching a food security mission to enhance the output of wheat, rice and pulses.
- Sixteen persons, including a policeman, were killed in violence at several places in Rajsthan when members of the backward Gujjar community, agitating for inclusion among the Scheduled Tribes, clashed with the police.
- The Class X examination results announced by CBSE shows an overall improvement of 7.28 percentage points, the highest such increase in recent times. The overall pass percentage this year is 84.44 compared to 77.16 in 2006.
- Government named Air India Chief V Thulsidas as CMD and his Indian counterpart Vishwapati Trivedi as Joint MD of the merged carrier.

MAY 30

- Achin Bansal from Punjab tops the All-India Joint Entrance Examination conducted by the Indian Institute of Technology.
- Zee Television pulls out of its five-year deal with BCCI on telecasting offshore matches.
- India takes a strong view against the granting of copyrights and patents to yoga postures by the US Patents and Trademarks Office and asks its mission in Washington to take up the matter with relevant authorities as it amounted to blatant misue of traditional knowledge.
- India needs young men and women with idealism to join politics, strengthen our democratic system and infuse a new vigour and vitality into it, Lok Sabha Speaker Somnath Chatterjee says.

MAY 31

- Strong performances by service and manufacturing sectors helped Indian economy expand by 9.4 per cent in 2006-07 - its second highest growth rate since independence.
- With 26 out of 30 districts hit by violence, Rajasthan continued to be on the boil on the third day of Gujjars' agitation for Scheduled Tribe status.
- India and the US are close to sewing up the 123 agreement but some 'hard

work' needs to be done over the next couple of days, American interlocutor Nicholas Burns says in Delhi.

- Nimbus decides to pay the BCCI the same amount that it had negotiated with Zee television for telecasting the ODIs India is to play in Ireland and Scotland against South Africa and Pakistan between June 26 and July 3, this year.

JUNE 1

- A terror strike on the RSS headquarters is foiled in Nagpur when three terrorists are shot dead while trying to crash their car through the barrier.

JUNE 2

- Jindal Steel and Power Ltd. bags the largest ever project awarded to an Indian company in Latin America, when it lands a massive $ 2.3 billion Mutun iron and steel project in Bolvia.

JUNE 3

- Union Energy Minister Sushil Kumar Shinde inaugurates the 100 MW Indira Sagar Power Station at Narmadanagar in Khandwa district of Madhya Pradesh.

JUNE 4

- The Centre extends till October 2006 the term of Justice Rajinder Sachar Committee examining the status of Muslims in the country.

JUNE 5

- Government increases the prices of petrol by Rs. 4 and diesel by Rs. 2 a litre, leaving the prices of kerosene and LPG untouched.
- Chairman of the Joint Chief of Staff of the US, General Peter Pace, holds talks with senior Indian security officials in New Delhi and hopes that both the countries would work jointly against terrorism.

JUNE 6

- Prime Minister of Nepal, Girija Prasad Koirala arrives in New Delhi on a four-day visit to India, which is his first overseas trip since assuming power in April 2006.
- President A.P.J. Abdul Kalam suggests creation of a World Knowledge Platform while addressing the Innovation and Leadership Forum organized by the US information technology giant IBM Corporation in Bangalore. IBM's Chairman and CEO Samuel J. Palmisano announces his company's plan to invest $ 6 billion in India in the next three years.

JUNE 7

- India supports the proposal of compulsory pilotage of the Malacca Straits mooted by Malaysia, Singapore and Indonesia, during the visit of the Deputy Prime Minister and Defence Minister of Malaysia Najib bin Tum Abdul Razak in New Delhi. The proposal was made during the Shangrila security dialogue held in Singapore from June 2-4, 2006.

JUNE 8

- President A.P.J. Abdul Kalam becomes the first President to undertake a historic 30-minute sortie in the Sukhoi-30 MKI of Indian Air Force.
- India is internationally declared free from rinderpest, a fatal viral disease that hits domestic cattle, buffaloes, sheep, goat and some breeds of pig.

JUNE 9

- Defence Minister Pranab Mukherjee presents Defence Minister's Awards for Excellence 2003-04 to public sector defence unit Hindustan Aeronautics Limited for performance and exports. It also wins the award for import substitution and innovation.

JUNE 10

- The Council for Advancement of People's Action and Rural technology (CAPART) Director-General, V.S. Rao announces that CAPART, an autonomous society under the Rural Development Ministry has decided to strengthen its monitoring mechanism to keep a check on the funds released to non-governmental organizations.

JUNE 11

- The Hindu's Rural Affairs Editor P. Sainath wins the Judge's Prize in the 2005 Harry Chapin Media Awards in New York.
- Noted lyricist Gulzar is conferred the Sahitya Shiromani Samman by Hindi-Urdu Sahitya Committee in Lucknow.

JUNE 12

- Surjit Singh Barnala is re-appointed as the Governor of Tamil Nadu for a fresh five-year term.
- The Golden Jubilee Celebrations of the Bhabha Atomic Research Centre begin at the Indira Gandhi Civil Centre for Atomic Research in Kalpakkam (Tamil Nadu)

JUNE 13

- Andhra Pradesh is rated the best performing State in the power sector in 2005-06, followed by Gujarat and Delhi, according to a report prepared by credit rating agency ICRA and CRISIL and released by Power Minister Sushil Kumar Shinde.
- India and South Africa sign an argeement on bilateral co-operation in the fields of administration, local self-governance, education and information technology.

JUNE 14

- Three-day bilateral talks between India and US on the civilian nuclear agreement or the '123 Agreement', seeking to comply with Section 123 of the US Atomic Energy Act, ends in New Delhi on a positive note with the two sides expressing their keenness to resolve very soon the various issues on the table.
- Kuwait's Emir Sheikh Sabah al-Ahmed al-Jabber al-Sabah arrives in New Delhi on a six-day official visit. This is the first trip by a ruler of the oil-rich Gulf country in two decades.

JUNE 15

- J.D. Rymbai of Congress party is sworn in as the Chief Minister of Meghalaya in Shillong, succeeding D.D. Lepang.
- R.S. Gavai is appointed as the Governor of Bihar.
- India nominates Shashi Tharoor, UN Under Secretary-General for Communication and Public Information, for the post of Secretary-General of the UN.

JUNE 16

- Chinese President Hu Jintao, in his meeting with Union Minister for Petroleum and Natural Gas Murli Deora on the sidelines of the SCO (Shanghai Co-operation Organization) Summit in Shanghai, says that Sino-Indian relations have entered a 'new phase' with Beijing committed to forge a long-term strategic co-operative partnership with New Delhi.

JUNE 17

- Sanjay Leela Bhansali's Black wins maxiumum number of awards, including those of the Best Actor and Best Actress for Amithabh Bachchan and Rani Mukherjee, respectively at the 7th IIFA (International Indian Film Academy) Awards in Dubai.

JUNE 18

- The 'Great June Uprising' is observed in Manipur as thousands of Manipuris march to Kekraput (Manipur) to pay tribute to those who died fighting for the protection of the territorial integrity of Manipur in June 2001

JUNE 19

- The Union Government sets up a committee headed by M.S. Valliathan, former Director of the Sri Chitra Thirunal Institute of Medical Sciences and Technology in Kerala, to look into the functioning of the (AIIMS) All India Institute of Medical Sciences.
- The HSIIDS (Haryana State Industrial and Infrastructure Development Co-operation) signs a joint venture agreement with Reliance Venture Limited, a group company of Reliance Industries, for the establishment of a multi-project Special Economic Zone in Haryana.

JUNE 20

- Sonia Gandhi flags off the fourth bus service between India and Pakistan, from Poonch in J&K to Rawalakot in POK, at the border post in J&K.

JUNE 21

- Prime Minister Manmohan Singh inaugurates the first phase of the 146.5 km long, Rs. 19,525 crore Mumbai Metro Rail Project.

JUNE 22

- The Government clears the sale of 10 per cent equity stakes in the public sector companies NALCO and NLC.
- R.S. Gavai is sworn in as the new Governor of Bihar.

JUNE 23

- CBI conducts raids at 19 places in four cities in connection with the case relating to allegations against certain officials of the Navy, the Army and the Defence Ministry, who were reportedly given illegal gratification for leaking secret documents.

JUNE 24

- Prime Minister Manmohan Singh inaugurates the 33 km long Rs. 6,395 crore Bangalore Metro Rail Project in Bangalore.
- Justice K. Narayana Kurup is nominated as the 'Global Ambassdor of Peace' by the New York-based World Trade Centres Association.

JUNE 25

- Sheikh Hasina Wazed, the former Prime Minister of Bangladesh is conferred the Mother Teresa International Award 2005 at a function in New Delhi.
- The Chairman of the world's largest steel making company L.N. Mittal wins over the world's second largest steel making company Arcelor following Arcelor's acceptance of an offer to merge with Mittal Steel.

JUNE 26

- India and China begin the eighth round of talks on their boundary dispute since the appointment of special representatives at the political level in 2003.

JUNE 27

- The LTTE admits responsibility for the assassination of former Prime Minister Rajiv Gandhi by describing the incident as a monumental historical tragedy.
- Vice-President Bhairon Singh Shekhawat launches a campaign against AIDS, YUVA (Youth Unite for Victory on AIDS), jointly sponsored by the National AIDS Control Organisation and the Union Ministry of Youth Affairs and Sports.

JUNE 28

- Prime Minister Manmohan Singh announces that the supersonic cruise missile BrahMos, co-produced by India and Russia, has been inducted into the Navy and would soon be part of the other wings of the armed forces.

JUNE 29

- S.Y. Quraishi is appointed as an Election Commissioner for a five-year term.

JUNE 30

- Pakistan decides not to give the Most Favoured Nation (MFN) status as well as the tariff concessions to India due under SAFTA (South Asian Free Trade Agreement) effective from July 1, 2006)

AUGUST 4

- In an effort to ensure that the nuclear deal does not crumble if India tests a nuclear device, both New Delhi and Washington have agreed to a one year notice period before the agreement can be termintated.

AUGUST 5

- Tripura Government has enforced a ban on import of chickens form Bangladesh where bird flu has been reported and asked the state machinery to be on alert in case of a possible outbreak of bird flu.

AUGUST 6

- The Government, which is now the domiant shareholder in State Bank of India is planning to provide capital to the banking behemoth.

AUGUST 8

- The Left Parties said they were ''unable to accept'' the 123 agreement in the context of the ''burgeoning strategic'' alliance with the United States and asked the Government not to operationalise it.
- The Central Government tightened the norms for external commercial borrowings (ECBs) to rein in the flow of overseas funds into the country.

AUGUST 9

- With public outrage growing over justice denied to the 1992-93 Mumbai riots victims, the Congress high command has asked Maharashtra Chief Minister Vilasrao Deshmukh to explain the action his government has taken on the findings of the Srikrishna Commission which investigated the mayhem that clamied 900 lives.
- The Suprme court refused to vacate its order staying the 27 per cent quota for OBCs in central educational instituions. Now it is clear that the controversial law cannot be implemented in the current academic year.

AUGUST 10

- It's stealthier than bird flu. The subprime virus from the money market of London, Frankfurt and New York has come back to attack Dalal street. After the biggest French bank, BNP Paribas pressed the panic button on, the US markset slipped into the red.
- Bangladeshi writer Taslima Nasreen was roughed up, and the organisers of her book release function were injured when workers of the Majlis-e-Ittehadul Musilimeen (MIM) led by three legislators barged into the Hyderabad Press Club hall and ransacked it.

AUGUST 11

- Mohammad Hamid Ansari, the common candidate of the UPA alliance and the Left parties was declared elected as the country's new Vice-President.
- In perhaps the first such intitative by a state government, Uttar Pradesh has introduced ''voluntary'' reservation of 30% in private sector investments in the state.

AUGUST 12

- Suspected milltants of the outlawed KLNFL and ULFA shot dead 14 more Hindi speaking persons including eight minors in Dolamara village of central Assam.

AUGUST 13

- Reeling under the challenge thrown by Prime Ministers' Manmohan Singh to withdraw support to the UPA Government the left leaders continued to indulge in aggressive public posturing while refusing to take any step to rock the UPA boat.

AUGUST 14

- In an ambitious and unique attempt to track unlawful activities, the government has decided to create a massive database of all mobile and fixed line calls within the contry for mapping calling patterns and social networks of subscribers.
- Indian Space Research Organisation chairman G. Madhavan Nair told that the country would launch a reusable rocket by 2010.

AUGUST 15

- Reservation cannot continue indefinitely and must come to an end one day, the Supreme court observed.

AUGUST 17

- Indian shares witnessed one of their biggest daily falls crashing 642 points amid a global market meltdown and erasing Rs. 170,000 crore of national weatlh.
- Government refuted the US state department's statement linking termination of the Indo-US nuclear deal with India carrying out a nuclear test.

AUGUST 18

- The "Mountain Man" from Bihar is no more. Darshan Manjhi, who achieved the impossible task of single handedly cutting through a mountain to make a link road to his village has left behind a saga of unmatched grit and a touching love story.

AUGUST 19

- The crisis for the UPA alliance government over the Indo-US civilian nuclear deal deepened with the CPI(M) demanding that the government should not proceed even a step further with the 123 agreement.

AUGUST 20

- The former chief minister and congress leader N.D. Tiwari was appointed Governor of Andhra Pradesh in place of Rameshwar Thakur who has been shifed to Karnataka.

AUGUST 21

- The Supreme Court orders Sanjay Dutt and five other convicts of 1993 serial blasts, released on bail till they received a copy of the order convicting them by the designated TADA court in Mumbai.
- The four Left Parties made it clear that they will desert the UPA alliance if talks are held with the International Atomic Ecergy Agency in pursuance of the India-US nuclear deal.

AUGUST 22

- Amid the tough postures taken by the Prime Minister and the left parties

over the India-US civil nuclear deal, the UPA allies are becoming jittery over the prospect of facing a mid term poll on a controversial issue like nuclear deal.

AUGUST 23

- In what would leave Finance Minister P. Chidambaram and Planning Commission Vice-Chairman Montek Singh Ahluwalia baffled, the Union Ministry of Minority Affairs has sought around Rs. 12,000 crore for carrying out developmental programmes for minority communities during the 11th plan.
- Unveiling his concept of "broader Asia", Japanese Prime Minister Shinzo Abe on Wednesday pitched in for closer co-operation between his country and India in defence, security and economic fields to create an "arc of freedom and prosperity" in the region.

AUGUST 24

- The murmurs of concern about 'Muslim votes' around the issue of the Indo-US civilan nuclear energy deal may not be a subject of open debate yet but the UPA government is silently pushing ahead with its "minority welfare" plank to address concerns raised by the Sachar Committee Report submitted to the Prime Minister last year.
- Pakistan's Supreme Court ruled today that former prime minister Nawaz Sharif, who was thrust into exile in 2000 after a military coup, could return to the country, in what could be a direct political challenge to President Pervez Mausharraf.

AUGUST 27

- Senior BJP leader and leader of Opposition in the Lok Sabha L.K. Advani has blamed the spurt in the terrorist attacks, including last night's twin blasts in Hyderabad, on the soft attitude of the Congress-led UPA Government towards terrorists and demanded the re-enactment of the Prevention of Terrorist Act (POTA).
- As Hyderabad city was trying to recover from the shock of the worst- ever terrorist attacks and loss of 42 lives in twin blasts on Saturday night, Chief Minister Y.S. Rajasekhara Reddy on Sunday categorically said that it was the handiwork of the terrorist organisations from Bangladesh and Pakistan.
- Ahead of the crucial debate on the contentious India-US civil nuclear agreement, the Congress is desperate to arrive at some sort of an understanding with the Left leaders to pre-empt its complete isolation in Parliament.

31 General Information

PRESIDENTS OF INDIA

Name	Tenure
Dr Rajendra Prasad (1884-1963)	26 January 1950-13 May 1962
Dr Sarvepalli Radhakrishnan (1888-1975)	13 May 1962-13 May 1967
Dr Zakir Husain (1897-1969)	13 May 1967-3 May 1969
Varahagiri Venkatagiri (1884-1980)	3 May 1969-20 July 1969 (Acting)
Justice Mohammad Hidayatullah (1905-1992)	20 July 1969-24 August 1969 (Acting)
Varahagiri Venkatagiri (1884-1980)	24 August 1969-24 August 1974
Fakhruddin Ali Ahmed (1905-1977)	24 August 1974-11 February 1977
B.D. Jatti (1913-2002)	11 February 1977-25 July 1977 (Acting)
Neelam Sanjiva Reddy (1913-1996)	25 July 1977-25 July 1982
Giani Zail Singh (1916-1994)	25 July 1982-25 July 1987
R. Venkataraman (b-1910)	25 July 1987-25 July 1992
Dr Shanker Dayal Sharma (1918-1999)	25 July 1992-25 July 1997
K.R. Narayanan (1920-1925)	25 July 1997-25 July 2002
Dr. A.P.J. Abdul Kalam (b-1931)	25 July 2002-25 July 2007
Smt. Pratibha Patil (b-1934)	25 July 2007-till date

VICE-PRESIDENTS OF INDIA

Name	Tenure
Dr Sarvepalli Radhakrishnan (1888-1975)	1952-1962
Dr Zakir Husain (1897-1969)	1962-1967
Varahagiri Venkatagiri (1884-1980)	1967-1969
Gopal Swarup Pathak (1896-1982)	1969-1974
B.D. Jatti (1913-2002)	1974-1979
Justice Mohammad Hidayatullah (1905-1992)	1979-1984
R. Venkataraman (b-1910)	1984-1987
Dr Shanker Dayal Sharma (1918-1999)	1987-1992
K.R. Narayanan (1920-1925)	1992-1997
Krishan Kant (1927-2002)	1997-2002
Bhairon Singh Shekhawat(b-1923)	2002-2007
Mohammed Hamid Ansari(b-1937)	2007-till date

PRIME MINISTERS OF INDIA

Name	Tenure
Jawaharlal Nehru (1889-1964)	15 August 1947-27 May 1964
Gulzari Lal Nanda (1898-1997)	27 May 1964-9 June 1964 (Acting)
Lal Bahadur Shastri (1904-1966)	9 June 1964-11 January 1966
Gulzari Lal Nanda (1898-1997)	11 January 1966-24 January 1966 (Acting)
Indira Gandhi (1917-1984)	24 January1966-24 March 1977
Morarji Desai (1896-1995)	24 March 1977-28 July 1979
Charan Singh (1902-1987)	28 July 1979-14 January 1980
Indira Gandhi (1917-1984)	14 January 1980-31 October 1984
Rajiv Gandhi (1944-1991)	31 October 1984-1 December 1989
Vishwanath Pratap Singh (b-1931)	2 December 1989-10 November 1990
Chandra Shekhar (b-1927)	10 November 1990-21 June 1991
P.V. Narasimha Rao (1921-2004)	21 June 1991-16 May 1996
Atal Bihari Vajpayee (b-1926)	16 May 1996-01 June 1996
H.D. Deve Gowda (b-1933)	01 June 1996-21 April 1997
I.K. Gujral (b-1933)	21 April 1997-18 March 1998
Atal Bihari Vajpayee (b-1926)	19 March 1998 -13 October 1999
Atal Bihari Vajpayee (b-1926)	13 October 1999 - 22 May 2004
Dr. Manmohan Singh (b-1932)	22 May 2004 - till date

CHIEF JUSTICES OF INDIA

Name	Tenure
Harilal J. Kania	26 January 1950—6 November 1951
M. Patanjali Sastri	7 November 1951—3 January 1954
Mehar Chand Mahajan	4 January 1954—22 December 1954
B.K. Mukherjea	23 December 1954—31 January 1956
S.R. Das	1 February 1956—30 September 1959
Bhuvaneshwar Prasad Sinha	1 October 1959—31 January 1964
P.B. Gajendragadkar	1 February 1964—15 March 1966
A.K. Sarkar	16 March 1966—29 June 1966
K. Subba Rao	30 June 1966—11 April 1967
K.N. Wanchoo	12 April 1967—24 February 1968
M. Hidayatullah	25 February 1968—16 December 1970
I.C. Shah	17 December 1970—21 January 1971
S.M. Sikri	22 January 1971—25 April 1973
A.N. Ray	26 April 1973—27 January 1977
M.H. Beg	28 January 1977—21 February 1978
Y.V. Chandrachud	22 February 1978—11 July 1985

Prafullachandra Natvarlal Bhagwati	12 July 1985—20 December 1986
R.S. Pathak	21 December 1986—18 June 1989
E.S. Venkataramaiah	19 June 1989—17 December 1989
S. Mukherjee	18 December 1989—25 September 1990
Ranganath Mishra	26 September 1990—24 November 1991
K.N. Singh	25 November 1991—12 December 1991
M.H. Kania	13 December 1991—17 November 1992
I.M. Sharma	18 November 1992—11 February 1993
M.N. Venkatachalaiah	12 February 1993—24 October 1994
A.M. Ahmadi	25 October 1994—24 March 1997
J.S. Verma	25 March 1997—17 January 1998
M.M. Punchhi	18 January 1998—9 October 1998
A.S. Anand	10 October 1998—31 October 2001
S.P. Bharucha	1 November 2001—5 May 2002
B.N. Kirpal	6 May 2002—7 November 2002
G.B. Pattanaiak	8 November 2002—18 December 2002
V.N. Khare	19 December 2002—1 May 2004
S. Rajendra Babu	02 May 2004—31 May 2004
R.C. Lahoti	01 June 2004—31 October 2005
Y.K. Sabharwal	01 November 2005—31 December 2006
K.G. Balakrishnan	14 January 2007—till date

CHIEF ELECTION COMMISSIONERS OF INDIA

Name	Tenure
Sukumar Sen	21 March 1950-19 December 1958
K.V.K. Sundaram	20 December 1958-30 September 1967
S.P. Sen Verma	1 October 1967-30 September 1972
Dr Nagendra Singh	1 October 1972-6 February 1973
T. Swaminathan	7 February 1973-17 June 1977
S.L. Shakdhar	18 June 1977-17 June 1982
R.K. Trivedi	18 June 1982-31 December 1985
R.V.S. Peri Sastri	1 January 1986-25 November 1990
Smt V.S. Rama Devi	26 November 1990-11 December 1990
T.N. Seshan	12 December 1990-11 December 1996
M.S. Gill	12 December 1996-13 June 2001
J.M. Lyngdoh	14 June 2001 - 7 February 2004
T.S. Krishna Murthy	8 February 2004 - 15 May 2005
B.B. Tandon	16 May 2005 - 07 February 2006
N. Gopalaswamy	8 February 2006

CHAIRMEN OF UPSC

Name	Tenure
Sir Ross Barker	1926-1932
Sir David Petrie	August 1932-1936
Sir Eyre Gorden	1937-1942
Sir F.W. Robertson	1942-1947
Sh. H.K. Kripalani	1 April 1947-13 January 1949
Sh. R.N. Banerjee	14 January 1949-9 May 1955
Sh. N. Govindarajan	10 May 1955-9 December 1955
Sh. V.S. Hejmadi	10 December 1955-9 December 1961
Sh. B.N. Jha	11 December 1961-22 February 1967
Sh. K.R. Damle	18 April 1967-2 March 1971
Sh. R.C.S. Sarkar	11 May 1971-1 February 1973
Dr. A.R. Kidwai	5 February 1973-4 February 1979
Dr. M.L. Shahare	16 February 1979-16 February 1985
Sh. H.K.L. Capoor	18 February 1985-5 March 1990
Sh. J.P. Gupta	5 March 1990-2 June 1992
Smt. R.M. Bathew (Kharbuli)	23 September 1992-23 August 1996
Sh. S.J.S. Chhatwal	23 August 1996-30 September 1996
Sh. J.M. Qureshi	30 September 1996-11 December 1998
Lt. Gen. (Retd.) Surinder Nath	11 December 1998-25 June 2002
Sh. P.C. Hota	25 June 2002-8 September 2003
Sh. Mata Prasad	8 September 2003-04 January 2005
Dr. S.R. Hashim	04 January 2005-01 April 2006
Sh. Gurbachan Jagat	01 April 2006-till date

CHAIRMAN AND MEMBERS OF THE UPSC
(As on 25 October 2006)

CHAIRMAN

SH. GURBACHAN JAGAT

MEMBERS

SH. B.N. NAVALAWALA

SH. SUBIR DUTTA

PROF. D.P. AGARWAL

AIR MARSHAL (RETD.) SATISH GOVIND INAMDAR

MS. PARVEEN TALHA

DR. BHURE LAL

MS. CHOKILA IYER

SH. K. ROY PAUL

PROF. K.S. CHALAM

CIVILIAN AWARDS

Bharat Ratna	:	The award is given for exceptional service towards the advancement of Art, Literature and Science, and in recognition of public service of the highest order.
Padma Vibhushan	:	The award is given for exceptional and distinguished service in any field including service rendered by the Government servants.
Padma Bhushan	:	The award is given for distinguished service of high order in any field including service rendered by the Government servants.
Padma Shri	:	The award is given for distinguished service in any field including service rendered by the Government servants.

In pursuance of the Supreme Court's Judgement, the Government had constituted a High Level Review Committee chaired by the Vice-President of India, to go into the guidelines for the Padma Awards and certain other aspects. The Review Committee submitted its report in November 1996 and the same has been accepted by the Government. The institution of these awards has been revived since 1997.

RECIPIENTS OF BHARAT RATNA

Name	Awarded in
Chakravarti Rajagopalachari (1878-1972)	1954
Dr Sarvepalli Radhakrishnan (1888-1975)	1954
Dr Chandrasekhar Venkat Raman (1888-1970)	1954
Dr Bhagwan Das (1869-1958)	1955
Dr Mokshagundam Visvesvaraya (1861-1962)	1955
Jawaharlal Nehru (1889-1964)	1955
Govind Ballabh Pant (1887-1961)	1957
Dr Dhondo Keshave Karve (1858-1962)	1958
Dr Bidhan Chandra Roy (1882-1962)	1961
Purushottam Das Tandon (1882-1962)	1961
Dr Rajendra Prasad (1884-1963)	1962
Dr Zakir Husain (1897-1969)	1963
Dr Pandurang Vaman Kane (1880-1972)	1963
Lal Bahadur Shastri (Posthumous) (1904-1966)	1966
Indira Gandhi (1917-1984)	1971
Varahagiri Venkatagiri (1884-1980)	1975
Kumaraswami Kamraj (Posthumous) (1903-1975)	1976

Mary Teresa Bojaxhiu (Mother Teresa) (1910-1997) 1980
Acharya Vinobha Bhave (Posthumous) (1895-1982) 1983
Khan Abdul Ghaffar Khan (1890-1988) 1987
Marudu Gopalan Ramachandran (Posthumous) (1917-1987) 1988
Dr Bhim Rao Ramji Ambedkar (Posthumous) (1891-1956) 1990
Dr Nelson Rolihlahla Mandela (b-1918) 1990
Rajiv Gandhi (Posthumous) (1944-1991) 1991
Sardar Vallabhbhai Patel (Posthumous) (1875-1950) 1991
Morarji Ranchhodji Desai (1896-1995) 1991
Maulana Abul Kalam Azad (Posthumous) (1888-1958) 1992
Jehangir Ratanji Dadabhai Tata (1904-1993) 1992
Satyajit Ray (Posthumous) (1922-1992) 1992
Aruna Asaf Ali (Posthumous) (1909-1996) 1997
Gulzari Lal Nanda (Posthumous) (1898-1997) 1997
Dr Avul Pakir Jainulabdeen Abdul Kalam (b-1931) 1997
Madurai Shanmukhavadivu Subbalakshmi (1916-2004) 1998
Chidambaram Subramaniam (1910-2000) 1998
Loknayak Jayaprakash Narayan (Posthumous) (1902-1979) 1999
Professor Amartya Sen (b-1933) 1999
Lokpriya Gopinath Bordoloi (Posthumous) (1890-1950) 1999
Pandit Ravi Shankar (b-1920) 1999
Sushri Lata Dinanath Mangeshkar (b-1929) 2001
Ustad Bismillah Khan (1916-2006) 2001

Padma Awards : Padma awards are amongst the highest civilian awards of the country. There are three categories of Padma Awards - 'Padma Vibhushan', 'Padma Bhushan' and 'Padma Shri'. These are given for distinguished service in any field including Art, Literature and Education, Science and Engineering, Sports, Medicine, etc. Padma Awards are announced on the eve of the Republic Day every year.

PADMA AWARDS CONFERRED ON REPUBLIC DAY 2007

Padma Vibhushan Recipients :
Prof. Balu Sankaran
Prof. Ennackal Chandy George Sudarshan
Shri Fali Sam Nariman
Shri Khushwant Singh
Shri Naresh Chandra
Shri Narinder Nath Vohra
Justice Prafulla Chandra Bhagwati
Prof. Raja Rao (Posthumous)
Dr. Raja Jesudoss Chelliah
Dr. V. Krishnamurthy

Padma Bhushan Recipients : Prof. Bhikhu Parekh

Shri Chandra Prasad Saikia (Posthumous)

Ms. Ela Gandhi

Father Gabriel Chiramel C.M.I.

Dr. Gopaldas Neeraj

Dr. Gurcharan Singh Kalkat

Mrs. Indra K. Nooyi

Dr. Jamshed J. Irani

Shri Javed Akhtar

Prof. Jeffrey D. Sachs

Justice K.T. Thomas

Shri Kavalam Narayana Panikkar

Capt. L.Z. Sailo

Dr. (Smt.) Manju Sharma

Dr. N. Mahalingam

Mr. Osamu Suzuki

Dr. Prithipal Singh Maini

Pandit Rajan Misra

Shri Ramankutty Nair

Pandit Sajan Misra

Dr. Saroj Ghose

Shri Sayed Haider Raza

Prof. (Dr.) Shiv Kumar Sarin

Prof. (Vaidya) Shriram Sharma

Prof. Somnath Hore (Postumous)

Shri Sunil Bharati Mittal

Hakim Syed Mohammad Sharfuddin Quadri

Prof. Tapan Kumar Raychaudhuri

Prof. Thirukodikaval Nilakanta Srinivasan

Shri Tyeb Mehta

Dr. (Smt.) V. Mohini Giri

Dr. Vilayanur Subramanian Ramachandran

Padma Shri Recipients : Prof. (Dr.) Adya Prasad Mishra

Shri Amitav Ghosh

Prof. Ananda Mohan Chakrabarty

Dr. (Smt.) Ananda Shankar Jayant

Shri Anantharamakrishnan Sivasailam

Dr. Anoop Misra

Prof. (Dr.) Ashok Kumar Hemal

Shri Astad Aderbad Deboo

Prof. (Dr.) Atul Kumar

Dr. B. Paul Thaliath

Dr. Bakul Harshadrai Dholakia

Dr. Balbir Singh

Dr. Baldev Raj

Shri Chiranjeev Milkha Singh

Prof. Deveindra Rahinwal (Postumous)

Prof. Dilip Biswas

Pandit Gajendra Narayan Singh

Smt. Geeta Chandran

Dr. Giriraj Kishore

Rajmata Goverdan Kumarri

Prof. (Dr.) Harpinder Singh Chawla

Prof. Kallipatti Ramasamy Palaniswamy

Prof. (Dr.) Khadg Singh Valdiya

Shri Khalid Zaheer

Shri Kiran Sharadchandra Karnik

Ms. Koneru Humpy

Dr. Lalit Pande

Shri Lama Thupten Phuntsok

Sister M. Cyril Mooney

Dr. M. Mohan Babu

Dr. Mahadev Prasad Pandey

Dr. Mahipal Singh Sachdev

Dr. Manjunath Cholenahally Nanjappa

Prof. Mayil Vahanan Natarajan

Dr. (Ms.) Meenakshi Gopinath

Ms. Mira Salganik Alias Mariam L'vovna Salganik

Dr. Mohsin Wali
Shri Mujtaba Hussain
Prof. Mushirul Hasan
Mrs. Naina Lal Kidwai
Smt. Naorem Ongbi Neelamani Devi
Prof. (Dr.) Narmada Prasad Gupta
Shri P. Gopinathan
Dr. P. Namperumalsamy
Smt. P.R. Thilagam
Shri Pannuru Sripathy
Dr. (Smt.) Pratibha Ray
Smt. Pushpa Hans
Dr. Rabi Narayan Bastia
Shri Rabinder Gokaldas Ahuja
Shri Rajinder Gupta
Shri Ravindra Dayal (Postumous)
Shri Remo Fernandes
Ms. Runa Banerjee
Prof. Rybakov Rostislav
Shri S. Dakshinamurthy Pillai
Shri S. Balachandra Menon
Smt. Shanti Hiranand
Smt. Shashikala Jawalkar
Prof. (Dr.) Shekhar Pathak
Dr. Sheo Bhagwan Tibrewal
Shri Sonam Skalzang
Shri Sonam Tshering Lepcha
Prof. Sudhir Kumar Sopory
Shri Sushil Gupta
Dr. (Ms.) Syeda Saiyidain Hameed
Shri T.S. Rangarajan Alias Kavignar Vaalee
Smt. Tarla Dalal
Ms. Teesta Setalvad
Prof. (Ms.) Temsula Ao
Prof. Thanu Padmanabhan
Dr. Thekkethil Kochandy Alex
Shri Thingbaijam Babu Singh

Shri Valayapatti A.R. Subramaniyam

Shri Vijai Dan Detha

Shri Vikram Seth

Shri Waman Thakre

Dr. Yusufkhan Mohamadkhan Pathan

JEEVAN RAKSHA PADAK SERIES OF AWARDS

The Jeevan Raksha Padak series of awards are given for courage and promptitude under circumstances of great danger to the life or bodily injury of the rescuer, displayed in an act or a series of acts of humane nature, in saving the life of a person from drowning, fire, rescue operations in mines, etc. There are three categories of Jeevan Raksha Padak awards viz. Sarvottam Jeevan Raksha Padak, Uttam Jeevan Raksha Padak and Jeevan Raksha Padak. Recommendations for Jeevan Raksha Padak series of awards are received from the State Governments / Union Territory Administrations and Ministries / Departments of the Government of India. On the basis of the recommendations of the Awards Committee, the President approved the award of Uttam Jeevan Raksha Padak to 3 persons and Jeevan Raksha Padak to 38 persons for the year 2006. No Sarvottam Jeevan Raksha Padak award was announced this year.

SAHITYA AKADEMI AWARDS 2005

Language	Title and Genre	Author
Assamese	Mouna Ounth Mukhar Hriday (Novel)	Yeshe Dorje Thongchi
Bengali	Haspatale Lekha Kbitaguchha (Poetry)	Binoy Mazumdar
Bodo	Jiuni Mwgthang Bisombi Arw Aroj (Poetry)	Mangalsingh Hazowary
Dogri	Dhaldi Dhuppe Da Sek (Short Stories)	Krishan Sharma
Gujarati	Akhand Zalar Vage (Poetry)	Suresh Dalal
Hindi	Kyap (Novel)	Manohar Shyam Joshi
Kannada	Teru (Novel)	Raghavendra Patil
Kashmiri	Yath Miani Joye (Poetry)	Hamidi Kashmiri
Konkani	Bhaangarsaall (Short Stories)	N. Shivdas
Maithili	Chanan Ghan Gachchiya (Poetry)	Vivekanand Thakur
Malayalam	Jappana Pukayila (Short Stories)	G.V. Kakkanadan
Manipuri	Pangal Shonbi Eishe Adomgeeni (Short Stories)	M. Nabakishore Singh
Marathi	Bhijaki Vahi (Poetry)	Arun Kolatkar
Nepali	Jeevan Goreto Ma (Novel)	Krishna Singh Moktan
Oriya	Gopapura (Short Stories)	Ramachandra Behera
Punjabi	Agni-Kalas (Short Stories)	Gurbachan Singh Bhullar
Rajasthani	Kisturi Mirag (Short Stories)	Chetan Swami
Sanskrit	Sri Bhargave-Raghaviyam (Epic)	Swami Rambhadracharya

Santhali	Bhabna (Poetry)	Jadumani Besra
Sindhi	Andhero Roshan Thiye	Dholan 'Rahi'
Tamil	Kalmaram (Novel)	G. Thilakavathi
Telugu	Tana Margam (Short Stories)	Abburi Chayadevi
Urdu	Ret Per Khema (Memoirs)	Jabir Husain

NOBEL LAUREATES

AMARTYA SEN (b-1933) : Prof. Amartya Sen is the recipient of the Nobel Prize for Economics for the year 1998, becoming the first Asian to have been honoured with the award. The Santiniketan-born economist who is a pioneer in Welfare Economics has to his credit several books and papers on aspects of welfare and development. An economist with a difference, Prof. Sen is a humanist. He has distinguished himself with his outstanding writings on famine, poverty, democracy, gender and social issues. The 'impossibility theorem' suggested earlier by Kenneth Arrow states that it was not possible to aggregate individual choices into a satisfactory choice for society as a whole. Prof. Sen showed mathematically that societies could find ways to alleviate such a poor outcome.

SUBRAMANIAN CHANDRASHEKAR (1910-1995) : The Nobel Prize for Physics in 1983 was awarded to Dr S. Chandrashekar, an Indian-born astrophysicist. Educated in Presidency College, Chennai, Dr Chandrashekar happened to be the nephew of his Nobel forbear, Sir C.V. Raman. He later migrated to the United States where he authored several books on Astrophysics and Stellar Dynamics. He developed a theory on white dwarf stars which posts a limit of mass of dwarf stars known also as Chandrashekar Limit. His theory explains the final stages of stellar evolution.

MOTHER TERESA (1910-1997) : The Nobel Peace Prize was awarded to Mother Teresa in 1979. Albanian parentage, Agnes Gonxha Bojaxhiu was born at Skopje, now in Yogoslavia. She joined the Irish order of the Sisters of Loretto at Dublin in 1928 and came to Kolkata in 1929 as a missionary, only to find the misery of the abandoned and the destitute. Concern for the poor and the sick prompted her to found a new congregation, Missionaries of Charity. Having become an Indian citizen, Mother Teresa served the cause of dying destitutes, lepers and drug addicts, through Nirmal Hriday (meaning Pure Heart), the main centre of her activity. Her selfless service and unique devotion, not only to helpless fellow-Indians but also to the cause of world peace, earned her and India the first Nobel Peace Prize.

HARGOBIND KHORANA (b. 1922) : Hargobind Khorana was awarded the Nobel Prize for Medicine in 1968. Of Indian origin, Dr Khorana was born in Raipur, Punjab (now in Pakistan). He took his doctoral degree in Chemistry from Liverpool University and joined the University of Wisconsin as a Faculty Member in 1960. His major breakthrough in the field of Medicine —interpreting the genetic code and analysing its function in protein synthesis — fetched him the Nobel Prize.

CHANDRASHEKAR VENKATARAMAN (1888-1970) : India's first Nobel Prize for Physics was claimed in 1930 by the renowned physicist Sir C.V. Raman. Born at Thiruvanaikkaval near Tiruchirapalli in Tamil Nadu, Raman studied at Presidency College, Chennai. Later, he served as Professor of Physics at Calcutta University. Recipient of many honours and awards, including the title of 'Sir', Sir C.V. Raman received the Nobel Prize for an important optics research, in which he discovered that diffused light contained rays of other wavelengths—what is now popularly known as Raman Effect. His theory discovered in 1928 explains the change in the frequency of light passing through a transparent medium.

RABINDRANATH TAGORE (1861-1941) : Rabindranath Tagore was the first Indian ever to receive a Nobel Prize. Popularly known as Gurudev, India's Poet Laureate Tagore was born on 7 May 1861 in Kolkata. He was awarded the Nobel Prize for Literature in recognition of his work Geetanjali, a collection of poems, in 1913. Tagore wrote many love lyrics. Geetanjali and Sadhana are among his important works. The poet, dramatist and novelist is also the author of India's National Anthem. In 1901 he founded the famous Santiniketan which later came to be known as Vishwabharati University.

COMMANDERS-IN-CHIEF

Name	Tenure
General Sir Roy Bucher	1 January 1948-14 January 1949
General (later Field Marshal) K.M. Cariappa	15 January 1949-14 January 1953
General Maharaj Rajendra Sinhji	15 January 1953-31 March 1955

CHIEFS OF ARMY STAFF

Name	Tenure
General Maharaj Rajendra Sinhji	1 April 1955-14 May 1955
General S.M. Srinagesh	15 May 1955-7 May 1957
General K.S. Thimayya	8 May 1957-7 May 1961
General R.N. Thapar	8 May 1961-19 November 1962
General J.N. Choudhuri	20 November 1962-7 June 1966
General P.P. Kumaramangalam	8 June 1966-7 June 1969
General S.H.F.J. Manekshaw	8 June 1969-31 December 1972
Field Marshal S.H.F.J. Manekshaw	1 January 1973-14 January 1973
General G.G. Bewoor	15 January 1973-31 May 1975
General T.N. Raina	1 June 1975-31 May 1978
General O.P. Malhotra	1 June 1978-31 May 1981
General K.V. Krishna Rao	1 June 1981-31 July 1983
General A.S. Vaidya	1 August 1983-31 January 1986
General K. Sunderji	1 February 1986-30 April 1988
General V.N. Sharma	1 May 1988-30 June 1990
General S.F. Rodrigues	1 July 1990-30 June 1993
General B.C. Joshi	1 July 1993-18 November 1994
General S. Roychowdhury	22 November 1994-30 September 1997
General V.P. Malik	1 October 1997-30 September 2000
General S. Padmanabhan	30 September 2000-31 December 2002
General N.C. Vij	1 January 2003-31 January 2005
General J.J. Singh	1 February 2005 - till date

CHIEFS OF NAVAL STAFF

Name	Tenure
Rear Admiral J.T.S. Hall	15 August 1947-14 August 1948
Admiral Sir Edward Parry	15 August 1948-13 October 1951
Admiral Sir Mark Pizey	14 October 1951-21 July 1955

Vice Admiral Sir Stephen Carlill	22 July 1955-21 April 1958
Vice Admiral R.D. Katari	22 April 1958-4 June 1962
Vice Admiral B.S. Soman	5 June 1962-3 March 1966
Admiral A.K. Chatterjee	4 March 1966-27 February 1970
Admiral S.M. Nanda	28 February 1970-28 February 1973
Admiral S.N. Kohli	1 March 1973-28 February 1976
Admiral J.L. Cursetji	1 March 1976-28 February 1979
Admiral R.L. Pereira	1 March 1979-28 February 1982
Admiral O.S. Dawson	1 March 1982-30 November 1984
Admiral R.H. Tahiliani	1 December 1984-30 November 1987
Admiral J.G. Nadkarni	1 December 1987-30 November 1990
Admiral Ramdas	1 December 1990-30 September 1993
Admiral V.S. Shekhawat	1 October 1993-30 September 1996
Admiral Vishnu Bhagwat	1 October 1996-30 December 1998
Admiral Sushil Kumar	31 December 1998 - 29 December 2001
Admiral Madhvendra Singh	29 December 2001 - 31 July 2004
Admiral Arun Prakash	1 August 2004 - 30 October 2006
Admiral Sureesh Mehta	30 October 2006 - till date

CHIEFS OF AIR STAFF

Name	Tenure
Air Marshal Sir Thomas Elmhirst	15 August 1947-21 February 1950
Air Marshal Sir Ronald Chapman	22 February 1950-9 December 1951
Air Marshal Sir Gerald Gibbs	10 December 1951-31 March 1954
Air Marshal S. Mukherjee	1 April 1954-8 November 1960
Air Marshal A.M. Engineer	1 December 1960-31 July 1964
Air Chief Marshal Arjan Singh	1 August 1964-15 July 1969
Air Chief Marshal P.C. Lal	16 July 1969-15 January 1973
Air Chief Marshal O.P. Mehra	16 January 1973-31 January 1976
Air Chief Marshal H. Moolgavkar	1 February 1976-31 August 1978
Air Chief Marshal I.H. Latif	1 September 1978-31 August 1981
Air Chief Marshal Dilbagh Singh	1 September 1981-4 September 1984
Air Chief Marshal L.M. Katre	5 September 1984-1 July 1985
Air Chief Marshal D.A. La Fontaine	3 July 1985-31 July 1988
Air Chief Marshal S.K. Mehra	1 August 1988-31 July 1991
Air Chief Marshal N.C. Suri	1 August 1991-31 July 1993

Air Chief Marshal S.K. Kaul .... 1 August 1993-31 December 1995

Air Chief Marshal S.K. Sareen .... 1 January 1996-31 December 1998

Air Chief Marshal A.Y. Tipnis .... 1 January 1999-31 December 2001

Air Chief Marshal S. Krishnaswamys .... 31 December 2001-31 December 2004

Air Chief Marshal S. P. Tyagi .... 31 December 2004-31 March 2007

Air Chief Marshal M.F. Major .... 31 March 2007-Till date

WINNERS OF PARAM VIR CHAKRA

Major Somnath Sharma, Kumaon Regiment
Posthumous-November 1947 (Kashmir Operations 1947-48)

2nd Lt. R.R. Rane, Corps of Engineers
April 1948 (Kashmir Operations 1947-48)

Company Havildar Major Piru Singh, Rajputana Rifles
Posthumous-July 1948 (Kashmir Operations 1947-48)

L / NK Karam Singh, Sikh Regiment
October 1948 (Kashmir Operations 1947-48)

Naik Jadunath Singh, Rajput Regiment
Posthumous-December 1948 (Kashmir Operations 1947-48)

Captain Gurbachan Singh Salaria, Gorkha Rifles
Posthumous-December 1961 (Congo)

Major Dhan Singh Thapa, Gorkha Rifles
October 1962 (Ladakh)

Subedar Joginder Singh, Sikh Regiment
Posthumous-October 1962 (NEFA)

Major Shaitan Singh, Kumaon Regiment
Posthumous-November 1962 (Ladakh)

CQMH Abdul Hamid, Grenadiers
Posthumous-September 1965 (Operation against Pakistan)

Lt. Col. A.B. Tarapore, Poona Horse
Posthumous-September 1965 (Operation against Pakistan)

Flg. Officer Nirmal Jit Singh Sekhon, Flg. Pilot
Posthumous-December 1971 (Indo-Pakistan conflict)

Major Hoshiar Singh, Grenadiers
December 1971 (Indo-Pakistan conflict)

2nd Lt. Arun Khetarpal, 17 Poona Horse
Posthumous-December 1971 (Indo-Pakistan conflict)

L / NK Albert Ekka, Brigade of Guards
Posthumous-December 1971 (Indo-Pakistan conflict)

Naib Subedar Bana Singh, J & K Light Infantry
June 1987 (Operations in Siachen Glacier)

Major Ramaswamy Parameswaran, Mahar Regiment,
Posthumous-November 1987 (IPKF Operations in Sri Lanka)

Capt Vikram Batra, 13 JAK Rif
Posthumous-June 1999 (OP Vijay in Kargil)

Lt Manoj Kumar Pandey, 1/11 GR
Posthumous-June 1999 (OP Vijay in Kargil)

Rifleman Sanjay Kumar, 13 JAK Rif
June 1999 (OP Vijay in Kargil)

Gdr Yogender Singh Yadav, 18 GDRS
June 1999 (OP Vijay in Kargil)

GALLANTRY AWARDS

The following Gallantry Awards were announced on the Independence Day, 2006:

Kirti Chakra	...	2 (2 Posthumous)
Shaurya Chakra	...	16 (10 Posthumous)
Bar to Sena Medal (G)	...	2
Sena Medal (G)	...	81 (15 Posthumous)
Nao Sena Medal (G)	...	6
Vayu Sena Medal (G)	...	1

The following Gallantry Awards were announced on the Republic Day, 2007

Kirti Chakra	...	6 (5 Posthumous)
Shaurya Chakra	...	31 (13 Posthumous)
Bar to Sena Medal/Nao Sena Medal/ Vayu Sena Medal (G)	...	4
Sena Medal/Nao Sena Medal/ Vayu Sena Medal (G)	...	74 (11 Posthumous)
Param Vishisht Seva Medal	...	27
Bar to Ati Vishisht Seva Medal	...	1
Ati Vishisht Seva Medal	...	52
Yudh Seva Medal	...	1
Bar to Vishisht Seva Medal	...	4
Vishisht Seva Medal	...	123
Bar to Sena Medal (G)	...	2
Sena Medal/Nao Sena Medal/ Vayu Sena Medal (Devotion to Duty)	...	68 (1 Posthumous)

IMPORTANT TRAINS

RAJDHANI TRAIN NAMES WITH DETAILS

Train No.	Train Name	Train Source Stn.	Train Destination Stn.
2301	Howrah Rajdhani	Howrah	New Delhi
2302	Howrah Rajdhani	New Delhi	Howrah Jn
2305	Howrah Rajdhani	Howrah	New Delhi

2306	Howrah Rajdhani	New Delhi	Howrah Jn
2309	Patna Rajdhani	Rajendra Nagar	New Delhi
2310	Patna Rajdhani	New Delhi	Rajendra Nagar
2313	Sealdah Rajdhani	Sealdah	New Delhi
2314	Sealdah Rajdhani	New Delhi	Sealdah
2421	Bhubaneswar Rajdhani	Bhubaneswar	New Delhi
2422	Bhubaneswar Rajdhani	New Delhi	Bhubaneswar
2423	Guwahati Rajdhani	Guwahati	New Delhi
2424	Guwahati Rajdhani	New Delhi	Guwahati
2425	Jammu Rajdhani	New Delhi	Jammu Tawi
2426	Jammu Rajdhani	Jammu Tawi	New Delhi
2429	Bangalore Rajdhani	Bangalore	H Nizamuddin
2430	Bangalore Rajdhani	H. Nizamuddin	Bangalore
2431	Trivandrum Rajdhani	Trivandrum CNTL	H.Nizamuddin
2432	Trivandrum Rajdhani	H Nizamuddin	Trivandrum CNTL
2433	Chennai Rajdhani	Chennai Central	H Nizamuddin
2434	Chennai Rajdhani	H Nizamuddin	Chennai Central
2435	Guwahati Rajdhani	Guwahati	New Delhi
2436	Guwahati Rajdhani	New Delhi	Guwahati
2437	Secunderabad Rajdhani	Secunderabad	H. Nizamuddin
2438	Secunderabad Rajdhani	Nizamuddin	Secunderabad
2439	Ranchi Rajdhani	Ranchi	New Delhi
2440	Ranchi Rajdhani	New Delhi	Ranchi
2441	Bilaspur Rajdhani	Bilaspur Jn	New Delhi
2442	Bilaspur Rajdhani	New Delhi	Bilaspur Jn
2443	Bhubaneswar Rajdhani	Bhubaneswar	New Delhi
2444	Bhubaneswar Rajdhani	New Delhi	Bhubaneswar
2951	Mumbai Rajdhani	Mumbai Central	New Delhi
2952	Mumbai Rajdhani	New Delhi	Mumbai Central
2953	August Kranti Rajdhani	Mumbai Central	H Nizamuddin
2954	August Kranti Rajdhani	H Nizamuddin	Mumbai Central
2957	Ahemdabad Rajdhani	Ahmedabad Jn	New Delhi
2958	Ahemdabad Rajdhani	New Delhi	Ahmedabad Jn
2423A	Dibrugarh-Guwahati Link Rajdhani	Dibrugarh	Guwahati
2424A	Guwahati-Dibrugarh Link Rajdhani	Guwahati	Dibrugarh
2435A	Dibrugarh-Guwahati Link Rajdhani	Dibrugarh	Guwahati

2436A	Guwahati-Dibrugarh Link Rajdhani	Guwahati	Dibrugarh

SHATABDI TRAINS

2001	Bhopal Shatabdi	Bhopal Jn	New Delhi
2002	Bhopal Shatabadi	New Delhi	Bhopal Jn
2003	Lucknow Shatabdi	Lucknow	New Delhi
2004	Lucknow Shatabdi	New Delhi	Lucknow
2005	Kalka Shatabdi	New Delhi	Kalka
2006	Kalka Shatabdi	Kalka	New Delhi
2007	Shatabdi	Chennai Central	Mysore Jn
2008	Shatabdi Exp	Mysore Jn	Chennai Central
2009	Shatabdi	Mumbai Central	Ahmedabad Jn
2010	Shatabdi	Ahmedabad Jn	Mumbai Central
2011	Kalka Shatabdi	New Delhi	Kalka
2012	Kalka Shatabdi	Kalka	New Delhi
2013	Amritsar Shatabdi	New Delhi	Amritsar Jn
2014	Amritsar Shatabdi	Amritsar Jn	New Delhi
2015	Ajmer Shatabdi	New Delhi	Ajmer Jn
2016	Ajmer Shatabdi	Ajmer Jn	New Delhi
2017	Dehradun Shatabdi	New Delhi	Dehradun
2018	Dehradun Shatabdi	Dehradun	New Delhi
2019	Shatabdi	Howrah Jn	Ranchi
2020	Shatabdi	Ranchi	Howrah Jn
2029	Swarna Shatabdi	New Delhi	Amritsar Jn
2030	Swarna Shatabdi	Amritsar Jn	New Delhi
2031	Amritsar Shatabdi	New Delhi	Amritsar Jn
2032	Amritsar Shatabdi	Amritsar Jn	New Delhi
2027	Shatabdi Express	Chennai Central	Bangalore
2028	Shatabdi Express	Bangalore	Chennai Central
2035	Shatabdi Express	Lucknow	New Delhi
2036	Shatabdi Express	New Delhi	Lucknow

SAMPARK KRANTI EXPRESS TRAINS

2121	Madhya Pradesh Sampark Kranti	Jabalpur	H Nizamuddin
2122	Madhya Pradesh Sampark Kranti	H Nizamuddin	Jabalpur
2329	West Bengal Sampark Kranti	Sealdah	Delhi
2330	West Bengal Sampark Kranti	Delhi	Sealdah
2445	Uttar Sampark Kranti	New Delhi	Udhampur

2446	Uttar Sampark Kranti	Udhampur	New Delhi
2447	Uttar Pradesh Sampark Kranti	Manikpur Jn	H Nizamuddin
2448	Uttar Pradesh Sampark Kranti	H Nizamuddin	Manikpur Jn
2449	Goa Sampark Sampark Kranti	Madgaon	H Nizamuddin
2450	Goa Sampark Sampark Kranti	H Nizamuddin	Madgaon
2463	Rajasthan Sampark Kranti	Delhi Rohilla	Jodhpur Jn
2464	Rajasthan Sampark Kranti	Jodhpur Jn	Delhi Rohilla
2501	Porovatar Sampark Kranti	Guwahati	New Delhi
2502	Porovatar Sampark Kranti	New Delhi	Guwahati
2565	Bihar Sampark Kranti	Darbhanga Jn	New Delhi
2566	Bihar Sampark Kranti	New Delhi	Darbhanga Jn
2649	Karnataka Sampark Kranti	Yesvantpur Jn	H Nizamuddin
2650	Karnataka Sampark Kranti	H Nizamuddin	Yesvantpur Jn
2651	Tamil Nadu Sampark Kranti	Madurai Jn	H Nizamuddin
2652	Tamil Nadu Sampark Kranti	H Nizamuddin	Madurai Jn
2653	Kerala Sampark Kranti	Kochuveli	Chandigarh
2654	Kerala Sampark Kranti	Chandigarh	Kochuveli
2707	Andhra Pradesh Sampark Kranti	Tirupati	H Nizamuddin
2708	Andhra Pradesh Sampark Kranti	H Nizamuddin	Tirupati
2819	Orissa Sampark Kranti	Bhubaneswar	New Delhi
2820	Orissa Sampark Kranti	New Delhi	Bhubaneswar
2823	Chhattisgarh Sampark Kranti	Durg	H Nizamuddin
2824	Chhattisgarh Sampark Kranti	H Nizamuddin	Durg
2825	Jharkhand Sampark Kranti	Ranchi	New Delhi
2826	Jharkhand Sampark Kranti	New Delhi	Ranchi
2907	Maharashtra Sampark Kranti	Bandra Terminus	H Nizamuddin
2908	Maharashtra Sampark Kranti	H Nizamuddin	Bandra Terminus
2917	Gujrat Sampark Kranti	Ahmedabad Jn	H Nizamuddin
2918	Gujrat Sampark Kranti	H Nizamuddin	Ahmedabad Jn
5035	UTR Sampark K Exp	Delhi	Kathgodam
5036	UTR Sampark K Exp	Kathgodam	Delhi

JANSHATABDI EXPRESS TRAINS

2021	Tata Janshatabdi	Howrah Jn	Barbil
2022	Tata Janshatabdi	Barbil	Howrah Jn
2023	Patna Janshatabdi	Howrah Jn	Patna

2024	Patna Janshatabdi	Patna	Howrah Jn
2051	Madgaon Janshatabdi	Dadar	Madgaon
2052	Madgaon Janshatabdi	Madgaon	Dadar
2055	Dehradun Janshatabdi	New Delhi	Dehradun
2056	Dehradun Janshatabdi	Dehradun	New Delhi
2057	Chandigarh Janshatabdi	New Delhi	Chandigarh
2058	Chandigarh Janshatabdi	Chandigarh	New Delhi
2059	Kota Janshatabdi	Kota Jn	Nizamuddin
2060	Kota Janshatabdi	Nizamuddin	Kota Jn
2061	Jabalpur Janshatabdi	Habibganj	Jabalpur
2062	Jabalpur Janshatabdi	Jabalpur	Habibganj
2065	Malda Town Janshatabdi	Howrah Jn	Malda Town
2066	Malda Town Janshatabdi	Malda Town	Howrah Jn
2067	Jorhat Janshatabdi	Guwahati	Jorhat Town
2068	Jorhat Janshatabdi	Jorhat Town	Guwahati
2069	Raigarh Janshatabdi	Raigarh	Gondia
2070	Raigarh Janshatabdi	Gondia	Raigarh
2071	Jan Shatabdi Exp.	Madgaon	Mangalore
2072	Jan Shatabdi Exp.	Mangalore	Madgaon
2073	Bhubaneswar Janshatabdi	Howrah Jn	Bhubaneswar
2074	Bhubaneswar Janshatabdi	Bhubaneswar	Howrah Jn
2075	Ernakulam Janshatabdi	Ernakulam Jn	Trivandrum Central
2076	Ernakulam Janshatabdi	Trivandrum Central	Ernakulam Jn
2077	Chennai Janshatabdi	Chennai Central	Vijayawada
2078	Chennai Janshatabdi	Vijayawada	Chennai Central
2079	Hubli Janshatabdi	Bangalore City Jn	Hubli
2080	Hubli Janshatabdi	Hubli	Bangalore City Jn
2083	Tanjavur Janshatabdi	Tanjavur	Coimbatore Jn
2084	Janshatabdi Ex	Coimbatore Jn	Tanjavur

SUPERFAST TRAINS

2101	Jnaneswari Exp	LokmanyaTilak T	Howrah
2102	Jnaneswari Exp	Howrah	LokmanyaTilak
2105	Vidarbha Exp	Mumbai CST	Nagpur
2106	Vidarbha Exp	Nagpur	Mumbai CST
2107	Lucknow Sup Exp	Lokmanya Tilak T	Lucknow

2108	LJN LTT Express	Lucknow	LokmanyaTilak T
2109	Panchavati Exp	Mumbai CST	Manmad Jn
2110	Panchavati Exp	Manmad Jn	Mumbai CST
2123	Deccan Queen	Mumbai	Pune
2124	Deccan Queen	Pune	Mumbai
2127	Intercity Exp	Mumbai CST	Pune Jn
2128	Intercity Exp	Pune Jn	Howrah Jn
2129	Azad Hind Exp	Pune Jn	Howrah Jn
2130	Azad Hind Exp	Howrah Jn	Pune Jn
2137	Punjab Mail	Mumbai CST	Firozpur Cant
2138	Punjab Mail	Firozpur Cant	Mumbai CST
2139	Sewagram Exp	Dadar	Nagpur
2140	Sewagram Exp	Nagpur	Dadar
2141	Rajendra Ngr Exp	LokmanyaTilak T	Rjndr Ngr Bihar
2142	RJPB LTT Sup Exp	Rjndr Ngr Bihar	LokmanyaTilak T
2145	Bhubaneswar Exp	LokmanyaTilak T	Bhubaneswar
2146	BBS LTT Sup Exp	Bhubaneswar	LokmanyaTilak T
2151	Samarsata Exp	LokmanyaTilak T	Howrah Jn
2152	Samarsata Exp	Howrah Jn	LokmanyaTilakT
2153	Habibganj Express	LokmaynaTilk T	Habibganj
2154	HBJ LTT Sup Ex	Habibganj	LokmaynaTilk T
2155	Bhopal Express	Habibganj	H Nizamuddin
2156	Bhopal Express	H Nizamuddin	Habibganj
2157	Hutatma Express	Pune Jn	Solapur Jn
2158	Hutatma Express	Solapur Jn	Pune Jn
2159	NGP JBP Sup Exp	Nagpur	Jabalpur
2160	Nagpur Sup Exp	Jabalpur	Nagpur
2161	Lashkar Express	LokmanyaTilak T	Agra Cantt
2162	Lashkar Express	Agra Cantt	LokmanyaTilak T
2163	Chennai Express	Dadar	Chennai Central
2164	Chennai Exp	Chennai Central	Dadar
2165	LTT BSB Sup Exp	LokmanyaTilak T	Varanasi Jn
2166	BSB LTT Sup Exp	Varanasi Jn	LokmanyaTilak T
2173	Udyog Nagri Exp	LokmanyaTilak T	Kanpur Central
2174	Udyog Nagri Exp	Kanpur Central	LokmanyaTilak T
2179	Taj Express	Gwalior	H Nizamuddin

2180	Taj Express	H Nizamuddin	Gwalior
2229	Lucknow Mail	Lucknow	New Delhi
2230	Lucknow Mail	New Delhi	Lucknow
2303	Poorva Express	Howrah Jn	New Delhi
2304	Poorva Express	New Delhi	Howrah Jn
2307	HWH--JU--Exp	Howrah Jn	Jodhpur Jn
2308	HWH--JU--Exp	Jodhpur	Howrah
2311	HWH DLI KLK Mail	Howrah Jn	Kalka
2312	Kalka Mail	Kalka	Howrah Jn
2315	Annanya Express	Sealdah	Ajmer Jn
2316	Annanya Express	Ajmer Jn	Sealdah
2317	Akal Takht Exp	Sealdah	Amritsar Jn
2318	ASR Sealdah Exp	Amritsar Jn	Sealdah
2321	HWH Mumbai Mail	Howrah Jn	Mumbai CST
2322	Kolkatta Mail	Mumbai CST	Howrah Jn
2323	HWH NDLS Express	Howrah Jn	New Delhi
2324	NDLS HWH Express	New Delhi	Howrah Jn
2327	Upasana Express	Howrah Jn	Dehradun
2328	Upasana Express	Dehradun	Howrah Jn
2343	Darjeeling Mail	Sealdah	New Jalpaiguri
2344	Darjeeling Mail	New Jalpaiguri	Sealdah
2345	Saraighat Exp	Howrah Jn	Guwahati
2346	Saraighat Express	Guwahati	Howrah Jn
2367	Vikramshila Exp	Bhagalpur	New Delhi
2368	Vikramshila Exp	New Delhi	Bhagalpur
2381	Poorva Express	Howrah Jn	New Delhi
2382	Poorva Express	New Delhi	Howrah jn
2387	Jansadharan	New Delhi	Rajendra Nagar
2388	Jansadharan	Rajendra Nagar	New Delhi
2391	Shramjeevi Exp	Rajgir	New Delhi
2392	Shramjeevi Exp	New Delhi	Rajgir
2393	Sampoorna Kranti Exp	Patna Jn	New Delhi
2394	Sampoorna Kranti Exp	New Delhi	Patna Jn
2395	Ziyarat Express	Rajendra Nagar	Ajmer Jn
2396	Ziyarat Express	Ajmer Jn	Rajendra Nagar
2397	Mahabodhi Exp	Gaya Jn	New Delhi

2398	Mahabodhi Exp	New Delhi	Gaya jn
2401	Magadh Express	Islampur	New Delhi
2402	Magadh Express	New Delhi	Islampur
2405	Gondwana Exp	Bhusaval Jn	H Nizamuddin
2406	Gondwana Express	H Nizmuddin	Bhusaval Jn
2409	Gondwana Express	Bilaspur Jn	H Nizamuddin
2410	Gondwana Express	H Nizamuddin	Bilaspur Jn
2411	Gondwana Exp	Jabalpur	H Nizmuddin
2412	Gondwana Express	H Nizamuddin	Jabalpur
2413	JP Jat Exp	Jaipur	Jammu Tawi
2414	Jammu JP Exp	Jammu Tawi	Jaipur
2415	Intercity Exp	Indore Jn Bg	H Nizamuddin
2416	Intercity Exp	H Nizamuddin	Indore Jn Bg
2417	Prayag Raj Exp	Allahabad Jn	New Delhi
2418	Prayag Raj Exp	New Delhi	Allahabad Jn
2419	Gomti Exp	Lucknow	New Delhi
2420	Gomti Express	New Delhi	Lucknow
2427	Rewa NDLS Exp	Rewa	New Delhi
2428	NDLS Rewa Exp	New Delhi	Rewa
2451	Shram Shakti Exp	Kanpur Central	New Delhi
2452	Shram Shakti Exp	New Delhi	Kanpur Central
2459	NDLSASR Express	New Delhi	Amritsar Jn
2460	ASR NDLS Exp	Amritsar Jn	New Delhi
2461	Mandoor Express	Delhi	Jodhpur Jn
2462	Mandoor Express	Jodhpur Jn	Delhi
2465	Ranthambore Exp	Sawai Madhopur	Jodhpur Jn
2466	Ranthambore Exp	Jodhpur Jn	Sawai Madhopur
2467	Inter City Express	Bikaner	Jaipur
2468	Inter City Express	Jaipur	Bikaner
2471	Swaraj Express	Mumbai Central	Jammu Tawi
2472	Swaraj Express	Jammu Tawi	Mumbai Central
2473	Sarvodaya Exp	Ahmedabad Jn	Jammu Tawi
2474	Sarvodaya Exp	Jammu Tawi	Ahmedabad Jn
2475	Hapa Jat Express	Hapa	Jammu Tawi
2476	Sarvodaya Exp	Jammu Tawi	Hapa
2477	Jam Jat Express	Jamnagar	Jammu Tawi

2478	Jat Jamnagar Exp	Jammu Tawi	Jamnagar
2497	Shane-Punjab Exp	Nizamuddin	Amritsar
2498	Shane-Punjab Exp	Amritsar	Nizamuddin
2503	SDAH NJP Express	Sealdah	New Jalpaiguri
2504	NJP SDAH Express	New Jalpaiguri	Sealdah
2505	North East Exp	Guwahati	New Delhi
2506	North East Exp	New Delhi	Guwahati
2533	Pushpak Express	Mumbai CST	Lucknow
2534	Pushpak Exp	Lucknow	Mumbai CST
2553	Vaishali Exp	Barauni Jn	New Delhi
2554	Vaishali Exp	New Delhi	Barauni Jn
2555	Gorakdam Express	Gorakhpur Jn	Rohtak Jn
2556	Gorakdam Express	Rohtak Jn	Gorakhpur Jn
2557	Sapt Kranti Exp	Muzaffarpur Jn	Delhi
2558	Sapt Kranti Exp	Delhi	Muzaffarpur Jn
2559	Shiv Ganga Exp	Varanasi Jn	New Delhi
2560	Shiv Ganga Exp	New Delhi	Varanasi Jn
2561	Swatantrata S Exp	Darbhanga Jn	New Delhi
2562	Swatantrata S Exp	New Delhi	Darbhanga Jn
2587	Amar Nath Exp	Gorakhpur Jn	Jammu Tawi
2588	Amar Nath Exp	Jammu Tawi	Gorakhpur Jn
2605	Pallavan Exp	Chennai Egmore	Tiruchchirapali
2606	Pallavan Exp	Tiruchchirapali	Chennai Egmore
2607	Lalbagh Express	Chennai Central	Bangalore CY Jn
2608	Lalbagh Exp	Bangalore CY Jn	Chennai Central
2615	Grand Trunk Exp	Chennai Central	New Delhi
2616	Grand Trunk Exp	New Delhi	Chennai Central
2617	Mangla Lksdp Exp	Ernakulam Jn	H Nizamuddin
2618	Mangla Lksdp Exp	H Nizamuddin	Ernakulam Jn
2619	Matsyagandha Exp	Lokmanyatilak T	Mangalore
2620	Matsyagandha Exp	Mangalore	Lokmanyatilak T
2621	Tamil Nadu Exp	Chennai Central	New Delhi
2622	Tamil Nadu Exp	New Delhi	Chennai Central
2623	Trivandrum Mail	Chennai Central	Trivandrum Cntl
2624	Chennai Mail	Trivandrum Cntl	Chennai Central
2625	Kerala Express	Trivandrum Cntl	New Delhi

2626	Kerala Express	New Delhi	Trivandrum Cntl
2627	Karnataka Exp	Bangalore CY Jn	New Delhi
2628	Karnataka Exp	New Delhi	Bangalore CY Jn
2631	Nellai Express	Chennai Egmore	Tirunelveli
2632	Nellai Express	Tirunelveli	Chennai Egmore
2633	Kanyakumari Exp	Chennai Egmore	Kanyakumari
2634	Kanyakumari Exp	Kanyakumari	Chennai Egmore
2635	Vaigai Exp	Chennai Egmore	Madurai Jn
2636	Vaigai Exp	Madurai Jn	Chennai Egmore
2637	Pandian Exp	Chennai Egmore	Madurai Jn
2638	Pandian Exp	Madurai Jn	Chennai Egmore
2639	Brindavan Exp	Chennai Central	Bangalore CY Jn
2640	Brindavan Exp	Bangalore CY Jn	Chennai Central
2641	Thirukkural Exp	Kanyakumari	H Nizamuddin
2642	Thirukkural Exp	H Nizamuddin	Kanyakumari
2643	Nizamuddin Exp	Trivandrum Cntl	H Nizamuddin
2644	Nizamuddin Exp	H Nizamuddin	Trivandrum Cntl
2645	Millennium Exp	Ernakulam Jn	H Nizamuddin
2646	Millennium Exp	H Nizamuddin	Ernakulam Jn
2647	Kongu Express	Coimbatore Jn	H Nizmuddin
2648	Kongu Express	H Nizmuddin	Coimbatore Jn
2655	Navjeevan Exp	Ahmedabad Jn	Chennai Central
2656	Navjeevan Exp	Chennai Central	Ahmedabad Jn
2657	Bangalore Mail	Chennai Central	Bangalore Cy Jn
2658	Chennai Mail	Bangalore Cy Jn	Chennai Central
2661	Tenkasi Express	Chennai Egmore	Tenkasi Jn
2662	Tenkasi Exp	Tenkasi Jn	Chennai Egmore
2663	HWH TPJ Express	Howrah Jn	Tiruchchirapali
2664	Howrah Express	Tiruchchirapali	Howrah Jn
2671	Nilagiri Exp	Chennai Central	Metupalaiyam
2672	Nilagiri Exp	Metupalaiyam	Chennai Central
2673	Cheran Express	Chennai Central	Coimbatore Jn
2674	Cheran Express	Coimbatore Jn	Chennai Central
2675	Kovai Express	Chennai Central	Coimbatore Jn
2676	Kovai Exp	Coimbatore Jn	Chennai Central
2677	Coimbatore Exp	Bangalore Cy Jn	Coimbatore Jn

2678	Bangalore Exp	Coimbatore Jn	Bangalore Cy Jn
2679	Inter City Exp	Chennai Central	Coimbatore Jn
2680	Inter City Exp	Coimbatore Jn	Chennai Central
2681		Chennai	Alleppey
2682		Alleppey	Chennai
2683	Bangalore SF Exp	Ernakulam Jn	Bangalore Cy Jn
2684	Ernakulam SF Exp	Bangalore Cy Jn	Ernakulam Jn
2703	Falaknuma Exp	Howrah Jn	Secunderabad Jn
2704	Falaknuma Exp	Secunderabad Jn	Howrah Jn
2705	BZA SC Exp	Vijayawada Jn	Secunderabad Jn
2706	SC BZA Exp	Secunderabad Jn	Vijayawada Jn
2709	Simhapuri Exp	Gudur Jn	Secunderabad Jn
2710	Simhapuri Exp	Secunderabad Jn	Gudur Jn
2711	Pinakini Exp	Vijayawada Jn	Chennai Central
2712	Pinakini Exp	Chennai Central	Vijayawada Jn
2713	Satavahana Exp	Vijayawada Jn	Secunderabad Jn
2714	Satavahana Exp	Secunderabad Jn	Vijayawada Jn
2715	Sachkand Sup Exp	Nanded	Amritsar
2716	Sachkand Sup Exp	Amritsar	Nanded
2717	Ratnachal Exp	Visakhapatnam	Vijayawada Jn
2718	Ratnachal Exp	Vijayawada Jn	Visakhapatnam
2725	Siddhaganga Express	Bangalore Jn	Hubli Jn
2726	Siddhaganga Express	Hubli Jn	Bangalore Jn
2747	Palnad Exp	Guntur Jn	Secunderabad Jn
2748	Palnad Exp	Secunderabad Jn	Guntur Jn
2759	Charminar Exp	Chennai Central	Hyderabad Deccan
2760	Charminar Exp	Hyderabad Deccan	Chennai Central
2763	Padmavathi Exp	Tirupati	Secunderabad Jn
2764	Padmavathi Exp	Secunderabad Jn	Tirupati
2779	Goa Express	Vasco Da Gama	H Nizamuddin
2780	Goa Express	H Nizamuddin	Vasco Da Gama
2801	Purushottam Exp	Puri	New Delhi
2802	Purushottam Exp	New Delhi	Puri
2803	Swarna Jayanti Exp	Visakhapatnam	H Nizamuddin
2804	Swarna Jayanti Exp	H Nizamuddin	Visakhapatnam
2805	Janmabhoomi Exp	Visakhapatnam	Tenali Jn

2806	Janmabhoomi Exp	Tenali Jn	Visakhapatnam
2807	Samta Express	Visakhapatnam	H Nizamuddin
2808	Samta Express	H Nizamuddin	Visakhapatnam
2809	Howrah Mail	Mumbai CST	Howrah Jn
2810	Howrah Mail	Howrah Jn	Mumbai CST
2811	Hatia Express	Lokmanyatilak T	Hatia
2812	Hatia Express	Hatia	Lokmanyatilak T
2813	Steel City Express	Howrah Jn	Bhubaneswar
2814	Steel City Express	Bhubaneswar	Howrah Jn
2815	Puri Express	Puri	New Delhi
2816	Puri Express	New Delhi	Puri
2817	Jharkhands/JEXP	Hatia	Delhi
2818	Jharkhand Express	Delhi	Hatia
2821	Dhauli Exp	Howrah Jn	Bhubaneswar
2822	Dhauli Exp	Bhubaneswar	Howrah Jn
2829	Bhubaneswar Exp	Chennai Central	Bhubaneswar
2830	BBS Chennai Exp	Bhubaneswar	Chennai Central
2841	Coromandal Exp	Howrah Jn	Chennai Central
2842	Coromandal Exp	Chennai Central	Howrah Jn
2845	BBS YPR SUP Exp	Bhubaneswar	Yesvantpur Jn
2846	Bhubaneswar Exp	Yesvantpur Jn	Bhubaneswar
2859	Gitanjali Exp	Mumbai CST	Howrah Jn
2860	Gitanjali Exp	Howrah Jn	Mumbai CST
2901	Gujarat Mail	Mumbai Central	Ahmedabad Jn
2902	Gujarat Mail	Ahmedabad Jn	Mumbai Central
2903	Golden Temple Mail	Mumbai Central	Amritsar
2904	Golden Temple Mail	Amritsar	Mumbai Central
2905	Porbandar Exp	Porbandar	Howrah Jn
2906	Porbandar Express	Howrah Jn	Porbandar
2915	Ashram Express	Ahmedabad Jn	Delhi
2916	Ashram Express	Delhi	Ahmedabad Jn
2925	Paschim Express	Bandra Terminus	Amritsar Jn
2926	Paschim Express	Amritsar Jn	Bandra Terminus
2927	Vadodara Exp	Mumbai Central	Vadodara Jn
2928	Vadodara Exp	Vadodara Jn	Mumbai Central
2933	Karnavati Exp	Mumbai Central	Ahmedabad Jn

2934	Karnavati Exp	Ahmedabad Jn	Mumbai Central
2941	Adi Asansol Exp	Ahmedabad Jn	Asansol Jn
2942	ASN Adi Sup Exp	Asansol Jn	Ahmedabad Jn
2955	BCT JP Express	Mumbai Central	Jaipur
2961	Avantika Exp	Mumbai Central	Indore Jn Bg
2962	Avantika Exp	Indore Jn Bg	Mumbai Central
2963	Mewar Express	H Nizamuddin	Udaipur City
2964	Mewar Express	Udaipur City	H Nizamuddin
2965	JP UDZ Sup Exp	Jaipur	Udaipur City
2966	UDZ JP Sup Exp	Udaipur City	Jaipur
2967	Jaipur Exp	Chennai Central	Jaipur
2968	JP Madras Express	Jaipur	Chennai Central
2973	Madras JP Express	Indore Jn Bg	Jaipur
2974	JP INDB Express	Jaipur	Indore Jn Bg
2977	Maru Sagar Exp	Ernakulam Jn	Jaipur
2978	Maru Sagar Exp	Jaipur	Ernakulam Jn
2979	BDTS JP Sup Exp	Badra Terminus	Jaipur
2980	JP BDTS Sup Exp	Jaipur	Bandra Terminus
2985	SDAH JP Express	Sealdah	Jaipur
2986	JP SDAH Express	Jaipur	Sealdah
Other Mail Express Trains			
0103	Mandavi Express	Mumbai CST	Madgaon
0104	Mandavi Express	Madgaon	Mumbai CST
0111	Konkan Kanya Exp	Mumbai CST	Madgaon
0112	Konkan Kanya Exp	Madgaon	Mumbai CST
1007	Deccan Express	Mumbai CST	Pune Jn
1008	Deccan Express	Pune Jn	Mumbai CST
1011	Mahalaxmi Exp	Mumbai CST	C Shahumharaj T
1012	Mahalaxmi Exp	C Shahumharaj T	Mumbai CST
1013	Coimbatore Exp	Lokmanyatilak T	Coimbatore Jn
1014	Lokmanya TT Exp	Coimbatore Jn	Lokmanyatilak T
1015	Kushinagar Exp	Lokmanyatilak T	Gorakhpur Jn
1016	Kushinagar Exp	Gorakhpur Jn	Lokmanyatilak T
1017	Chalukya Express	Dadar	Bangalore CY Jn
1018	Chalukya Exp	Bangalore CY Jn	Dadar

1019	Konark Express	Mumbai CST	Bhubaneswar
1020	Konark Express	Bhubaneswar	Mumbai CST
1023	Sahyadri Express	Mumbai CST	C Shahumharaj T
1024	Sahyadri Exp	C Shahumharaj T	Mumbai CST
1031	Gyan Ganga Exp	Pune Jn	Manduadih
1032	Gyan Ganga Exp	Manduadih	Pune Jn
1033	Pune DBG Express	Pune Jn	Darbhanga Jn
1034	DBG Pune Exp	Darbhanga Jn	Pune Jn
1035	Sharavathi Exp	Dadar	Mysore Jn
1036	Sharavathi Exp	Mysore Jn	Dadar
1037	Pune PNBE Exp	Pune Jn	Patna Jn
1038	PNBE Pune Exp	Patna Jn	Pune Jn
1039	Maharashtra Exp	C Shahumharaj T	Gondia Jn
1040	Maharashtra Exp	Gondia Jn	C Shahumharaj T
1043	Madurai Express	Lokmanyatilak T	Madurai Jn
1044	Lokmanya TT Tilak	Madurai Jn	Lokmanyatilak T
1053	Nizamuddin Exp	C Shahumharaj T	H Nizamuddin
1054	NZM KOP Exp	H Nizamuddin	C Shahumharaj T
1055	Godan Express	Lokmanyatilak T	Gorakhpur Jn
1056	Godan Express	Gorakhpur Jn	Lokmanyatilak T
1057	DR-Amritsar Exp	Dadar	Amritsar Jn
1058	ASR DR Express	Amritsar Jn	Dadar
1059	Chhapra Express	Lokmanyatilak T	Chhapra
1060	CPR LTT Express	Chhapra	Lokmanyatilak T
1061	Pawan Express	Lokmanyatilak T	Muzaffarpur Jn
1062	MFP LTT Express	Muzaffarpur Jn	Lokmanyatilak T
1067	Saket Express	Lokmanyatilak T	Faizabad Jn
1068	Saket Express	Faizabad Jn	Lokmanyatilak T
1069	Tulsi Exp	Lokmanyatilak T	Allahabad Jn
1070	Tulsi Express	Allahabad Jn	Lokmanyatilak T
1071	Kamayani Express	Lokmanyatilak T	Varanasi Jn
1072	Kamayani Express	Varanasi Jn	Lokmanyatilak T
1077	Jhelum Express	Pune Jn	Jammu Tawi
1078	Jhelum Express	Jammu Tawi	Pune Jn
1093	Mahanagari Exp	Mumbai CST	Varanasi Jn
1094	Mahanagari Exp	Varanasi Jn	Mumbai CST

1095	Ahimsa Express	Ahmedabad Jn	Pune Jn
1096	Ahimsa Express	Pune Jn	Ahmedabad Jn
1097	Ernakulam Exp	Pune Jn	Ernakuman Jn
1098	Poorna Express	Ernakuman Jn	Pune Jn
1107	Bundelkhand Exp	Gwalior	Varanasi Jn
1108	Bundelkhand Exp	Varanasi Jn	Gwalior
1123	BJU GWL Mail	Barauni Jn	Gwalior
1124	GWL BJU Mail	Gwalior	Barauni Jn
1159	Chambal Exp	Howrah Jn	Gwalior
1160	Chambal Express	Gwalior	Howrah Jn
1181	Chambal Exp	Howrah Jn	Agra Cantt
1182	Chambal Express	Agra Cantt	Howrah Jn
1403	Godavari Exp	Lokmanyatilak T	Manmad Jn
1404	Godavari Exp	Manmad Jn	Lokmanyatilak T
1447	Shaktipunj Exp	Jabalpur	Howrah Jn
1448	Shaktipunj Exp	Howrah Jn	Jabalpur
1449	Mahakaushal Exp	Jabalpur	H Nizamuddin
1450	Mahakaushal Exp	H Nizamuddin	Jabalpur
1451	Dikshabhumi Exp	Nagpur	Gaya Jn
1452	Dikshabhumi Exp	Gaya Jn	Nagpur
1453	Prerna Express	Ahmedabad Jn	Nagpur
1454	Prerna Express	Nagpur	Ahmedabad Jn
1473	BPL Jabalpur Exp	Bhopal Jn	Jabalpur
1474	JBP Bhopal Exp	Jabalpur	Bhopal Jn
3005	Amritsar Mail	Howrah Jn	Amritsar Jn
3006	ASR HWH Mail	Amritsar Jn	Howrah Jn
3007	U/ABhatoofan Exp	Howrah Jn	Shri Ganganagar
3008	U A Toofan Exp	Shri Ganganagar	Howrah Jn
3009	Doon Express	Howrah Jn	Dehradun
3010	Doon Express	Dehradun	Howrah Jn
3019	Bagh Express	Howrah Jn	Kathgodam
3020	Bagh Express	Kathgodam	Howrah Jn
3021	Mithila Express	Howrah Jn	Raxual Jn
3022	Mithila Express	Raxual Jn	Howrah Jn
3023	HWH Gaya Express	Howrah Jn	Gaya Jn
3024	Gaya HWH Express	Gaya Jn	Howrah Jn

3025	HWH BPL Express	Howrah Jn	Bhopal Jn
3026	BPL Howrah Exp	Bhopal Jn	Howrah Jn
3027	Vibhuti Express	Howrah Jn	Varanasi Jn
3028	Vibhuti Express	Varanasi Jn	Howrah Jn
3029	Coal Field Exp	Howrah Jn	Dhanbad Jn
3030	Coal Field Exp	Dhanbad Jn	Howrah Jn
3049	Amritsar Exp	Howrah Jn	Amritsar Jn
3050	ASR HWH Express	Amritsar Jn	Howrah Jn
3073	Himgiri Express	Howrah Jn	Jammu Tawi
3074	Himgiri Express	Jammu Tawi	Howrah Jn
3111	Lal Quila Exp	Sealdah	Delhi
3112	Lal Quila Exp	Delhi	Sealdah
3133	SDAH BSB Exp	Sealdah	Varanasi Jn
3134	BSB SDAH Express	Varanasi Jn	Sealdah
3141	Testa Torsa Exp	Sealdah	New Alipurdaur
3142	Testa Torsa Exp	New Alipurdaur	Sealdah
3147	Uttar Banga Exp	Sealdah	New Cooch Behar
3148	Uttar Banga Exp	New Cooch Behar	Sealdah
3149	Kanchankanya Exp	Sealdah	Alipur Daur Jn
3150	Kanchankanya Exp	Alipur Daur Jn	Sealdah
3151	Jammu Tawi Exp	Sealdah	Jammu Tawi
3152	Sealdah Express	Jammu Tawi	Sealdah
3201	RJPB(T)-LTT Exp	Rjndr Ngr Bihar	Lokmanyatilak T
3202	LTT RJPB Exp	Lokmanyatilak T	Rjndr Ngr Bihar
3226	Intercity Express	Danapur	Darbhanga Jn
3245	Capital Express	New Jalpaiguri	Danapur
3246	Capital Exp	Danapur	New Jalpaiguri
3287	South Bihar Exp	Durg	Danapur
3288	South Bihar Exp	Danapur	Durg
3289	Archna Express	Rjndr Ngr Bihar	Jammu Tawi
3290	Archna Express	Jammu Tawi	Rjndr Ngr Bihar
3307	Gangasutlej Exp	Dhanbad Jn	Firozpur Cant
3308	Gangasutlej Exp	Firozpur Cant	Dhanbad Jn
3317	Blackdiamond Exp	Howraj Jn	Dhanbad Jn
3318	Blackdiamond Exp	Dhanbad Jn	Howraj Jn
3329	Gangadamodar Exp	Dhanbad Jn	Rjndr Ngr Bihar

3330	Gangadamodar Exp	Rjndr Ngr Bihar	Dhanbad Jn
3403	Vananchal Exp	Ranchi	Bhagalpur
3404	Vananchal Exp	Bhagalpur	Ranchi
3413	Farakka Express	Malda Town	Delhi
3414	Farakka Express	Delhi	Malda Town
3419	Janasewa Express	Bhagalpur	Muzaffarpur Jn
3420	Janasewa Express	Muzaffarpur Jn	Bhagalpur
3447	BGP DR Express	Bhagalpur	Dadar
3448	Bhagalpur Exp	Dadar	Bhagalpur
3483	Farakka Express	Malda Town	Delhi
3484	Farakka Express	Delhi	Malda Town
3503	Intercity Exp	Sealdah	Asansol Jn
3504	Intercity Exp	Asansol Jn	Sealdah
4005	Lichchavi Exp	Muzaffarpur Jn	New Delhi
4006	Lichchavi Exp	New Delhi	Muzaffarpur Jn
4015	Sadbhawana Exp	Raxual Jn	Delhi
4016	Sadbhawana Exp	Delhi	Raxual Jn
4017	Sadbhavna Exp	Muzaffarpur Jn	Delhi
4018	Sadbhavna Exp	Delhi	Muzaffarpur Jn
4025	Kaifiyat Exp	Azamgarh	Delhi
4026	Kaifiyat Exp	Delhi	Azamgarh
4033	Jammu Mail	Delhi	Jammu Tawi
4034	Jammu Mail	Jammu Tawi	Delhi
4035	Dauladhar Exp	Delhi	Pathankot
4036	Dauladhar Exp	Pathankot	Delhi
4041	Mussoorie Exp	Delhi S Rohilla	Dehradun
4042	Mussoorie Exp	Dehradun	Delhi S Rohilla
4055	Brahmputra Mail	Dibrugarh Town	Delhi
4056	Brahmputra Mail	Delhi	Dibrugarh Town
4059	DLI JSM Express	Delhi	Jaisalmer
4060	JSM DLI Express	Jaisalmer	Delhi
4060A	Malani Exp	Barmer	Delhi
4083	Mahananda Exp	Alipur Duar Jn	Delhi
4084	Mahananda Exp	Delhi	Alipur Duar Jn
4115	ALD HW Exp	Allahabad Jn	Haridwar Jn
4116	HW ALD Exp	Haridwar Jn	Allahabad Jn

4163	Sangam Express	Allahabad Jn	Meerut City
4164	Sangam Exp	Meerut City	Allahabad Jn
4201	LKO MTJ Express	Lucknow	Mathura Jn
4228	Varuna Exp	Mathura Jn	Lucknow
4231	LKO CDG Express	Lucknow	Chandigarh
4232	CDG LKO Express	Chandigarh	Lucknow
4257	K V Exp	Varanasi Jn	New Delhi
4258	Kashi V Express	New Delhi	Varanasi Jn
4265	BSB DDN Exp	Varanasi Jn	Dehradun
4266	DDN BSB Express	Dehradun	Varanasi Jn
4309	Ujjaini Express	Ujjain Jn	Dehradun
4310	Ujjaiyani Exp	Dehradun	Ujjain Jn
4311	Ala Hazrat Exp	Bareilly	Bhuj
4312	Ala Hazrat Exp	Bhuj	Bareilly
4313	Bareilly Exp	Dadar	Bareilly
4314	BE Dadar Exp	Bareilly	Dadar
4317	IND DDN Express	Indore Jn Bg	Dehradun
4318	DDN INDB Exp	Dehradun	Indore Jn Bg
4319	KGM DDN Express	Kathgodam	Dehradun
4320	DDN KGM Express	Dehradun	Kathgodam
4370A	Triveni Exp	Bareilly	Shakti Nagar
4517	Unchahar Exp	Allahabad Jn	Ambala Cant Jn
4518	Unchahar Exp	Amabala Cant Jn	Allahabad Jn
4519	Kisan Express	Delhi	Bhatinda Jn
4520	Kisan Express	Bhatinda Jn	Delhi
4523	MFP UMB Exp	Muzaffarpur Jn	Ambala Cant Jn
4524	UMB MFP Express	Ambala Cant Jn	Muzaffarpur Jn
4609	Hemkunt Exp	Rishikesh	Jammu Tawi
4610	Hemkunt Exp	Jammu Tawi	Rishikesh
4645	Shalimar Exp	New Delhi	Jammu Tawi
4646	Shalimar Exp	Jammu Tawi	New Delhi
4649	Saryuyamuna Exp	Darbhanga Jn	Amritsar Jn
4650	Saryuyamuna Exp	Amritsar Jn	Darbhanga Jn
4673	Shaheed Express	Darbhanga Jn	Amritsar Jn
4674	Shaheed Exp	Amritsar Jn	Darbhanga Jn
4681	NDLS JUC Express	New Delhi	Jalandhar City

4682	JUC NDLS Express	Jalandhar City	New Delhi
4707	Ranakpur Express	Bikaner Jn	Bandra Terminus
4708	Ranakpur Express	Bandra Terminus	Bikaner Jn
4711	HW SGNR Express	Haridwar Jn	Shri Ganganagar
4712	SGNR HW Express	Shri Ganganagar	Haridwar Jn
4721	Intercity Exp	New Delhi	Shri Ganganagar
4722	Intercity Exp	Shri Ganganagar	New Delhi
4723	Kalindi Express	Farrukhabad	Bhiwani
4724	Kalindi Express	Bhiwani	Farrukhabad
4731	NDLS BTI Exp	New Delhi	Bhatinda Jn
4732	BTI NDLS Express	Bhatinda Jn	New Delhi
4789	Bikaner Express	Rewari	Bikaner Jn
4790	Bikaner Express	Bikaner Jn	Rewari
4791	Bikaner Mail	Rewari	Bikaner Jn
4792	Bikaner Mail	Bikaner Jn	Rewari
4809	JSM JU Express	Jaisalmer	Jodhpur Jn
4810	JU JSM Express	Jodhpur Jn	Jaisalmer
4845	Surya Nagri Exp	Jodhpur Jn	Bandra Terminus
4846	Surya Nagari Exp	Bandra Terminus	Jodhpur Jn
4853	Marudhar Express	Jodhpur Jn	Varanasi Jn
4854	Marudhar Express	Varanasi Jn	Jodhpur Jn
4887	KLK JU Express	Kalka	Jodhpur Jn
4887A	HW JU Link Exp	Haridwar Jn	Jodhpur Jn
4888	Jodhpur KLK Exp	Jodhpur Jn	Kalka
5001	MFP DDN Exp	Muzaffarpur Jn	Dehradun
5002	DDN MFP Exp	Dehradun	Muzaffarpur Jn
5003	Chaurichaura Exp	Kanpur Central	Gorakhpur Jn
5004	Chaurichaura Exp	Gorakhpur Jn	Kanpur Central
5005	GKP DDN Express	Gorakhpur Jn	Dehradun
5006	DDN GKP Exp	Dehradun	Gorakhpur Jn
5009	Chitrakut Exp	Jabalpur	Lucknow
5010	Chitrakut Exp	Lucknow	Jabalpur
5011	Raptisagar Exp	Trivandrum CNTL	Gorakhpur Jn
5012	Rapti Sagar Exp	Gorakhpur Jn	Trivandrum CNTL
5013	Ranikhet Exp	Delhi Rohilla	Kathgodam
5014	Ranikhet Exp	Kathgodam	Delhi Rohilla

5017	LTT GKP Express	Lokmanyatilak T	Gorakhpur Jn
5018	GKP LTT Exp	Gorakhpur Jn	Lokmanyatilak T
5027	Maurya Exp	Hatia	Gorakhpur Jn
5028	Maurya Express	Gorakhpur Jn	Hatia
5045	Gorakhpur Exp	Okha	Gorakhpur Jn
5046	GKP Okha Express	Gorakhpur Jn	Okha
5051	HWH GKP Express	Howrah Jn	Gorakhpur Jn
5052	GKP HWH Express	Gorakhpur Jn	Howrah Jn
5089	Gorakhpur Exp	Secunderabad Jn	Gorakhpur Jn
5090	GKP SC Express	Gorakhpur Jn	Secunderabad Jn
5091	Gorakhpur Exp	Bangalore CY Jn	Gorakhpur Jn
5092	GKP SBC Express	Gorakhpur Jn	Bangalore CY Jn
5097	Amarnath Exp	Barauni Jn	Jammu Tawi
5098	Amarnath Exp	Jammu Tawi	Barauni Jn
5105	BDME MUV Kei Exp	Baidyanathdham	Manduadih
5106	MbUV BDME Express	Manduadih	Baidyanathdham
5159	Sarnath Express	Durg	Chhapra
5160	Sarnath Express	Chhapra	Durg
5203	BJU LJN Exp	Barauni Jn	Lucknow
5204	LJN BJU EXp	Lucknow	Barauni Jn
5221	Raptisagar Exp	Cochin	Barauni Jn
5222	Raptisagar Exp	Barauni Jn	Ernakulam Jn
5227	Muzaffarpur Exp	Yesvantpur Jn	Muzaffarpur Jn
5228	MFP YPR Exp	Muzaffarpur Jn	Yesvantpur Jn
5273	Satyagrah Exp	Raxual Jn	Delhi
5274	Satyagrah Exp	Delhi	Raxual Jn
5609	Abadh Assam Exp	Guwahati	Bikaner Jn
5610	Avadh Assam Exp	Lalgarh Jn	Guwahati
5623	Guwahati Exp	Cochin	Guwahati
5624	GHY ERS Express	Guwahati	Ernakulam
5625	Guwahati Exp	Bangalore CY Jn	Guwahati
5626	GHY-SBC-Express	Guwahati	Bangalore Cy Jn
5627	Guwahati Exp	Trivandrum CNTL	Guwahati
5628	GHY-TVC-Express	Guwahati	Trivandrum CNTL
5629	Guwahati Express	Chennai Egmore	Guwahati
5630	Guwahati MS Exp	Guwahati	Chennai Egmore

5631	JU Ghy Express	Jodhpur JN	Guwahati
5632	Ghy JU Bkn Exp	Guwahati	Jodhpur JN
5635	Guwahati Express	Okha	Guwahati
5636	Dwarka Express	Guwahati	Okha
5637	SC GHY Express	Secunderabad Jn	Guwahati
5638	GHY SC Express	Guwahati	Secunderabad Jn
5639	Puri GHY Express	Puri	Guwahati
5640	GHY Puri Express	Guwahati	Puri
5641	Jhajha Ghy Exp	Jhajha	Guwahati
5642	GHY Jhajha Exp	Guwahati	Jhajha
5645	Dr-Guwahati Exp	Dadar	Guwahati
5646	GHY Dadar Exp	Guwahati	Dadar
5647	Dr Guwahati Exp	Dadar	Guwahati
5648	GHY DR Express	Guwahati	Dadar
5651	Lohit Express	Guwahati	Jammu Tawi
5652	Lohit Express	Jammu Tawi	Guwahati
5653	Amarnath Express	Guwahati	Jammu Tawi
5654	Amarnath Express	Jammu Tawi	Guwahati
5657	Kanchanjanga Exp	Sealdah	Guwahati
5658	Kanchanjanga Exp	Guwahati	Sealdah
5691	Cachar Express	Lumding Jn	Silchar
5692	Cachar Express	Silchar	Lumding Jn
5693	Barak Valley Exp	Lumding Jn	Amritsar Jn
5694	Barak Valley Exp	Silchar	Lumding Jn
5707	KIR ASR Express	Kathiar Jn	Amritsar Jn
5708	ASR KIR Express	Amritsar Jn	Katihar Jn
5761	RNC APDJ Express	Ranchi	Alipur Duar Jn
5762	APDJ RNC Express	Alipur Duar Jn	Ranchi
5813	Arunachal Exp	Rangiya Jn	Murkeongselek
5814	Arunachal Exp	North Lakhimpur	Rangiya Jn
5929	Dibrugarh Exp	Chennai Egmore	Dibrugarh Town
5930	DBRT MS Express	Dibrugarh Town	Chennai Egmore
5933	DBRT ASR Express	Dibrugarh Town	Amritsar Jn
5934	ASR DBRT Express	Amritsar Jn	Dibrugarh Town
5959	Kamrup Express	Howrah Jn	Dibrugarh Town
5960	Kamrup Express	Dibrugarh Town	Howrah Jn
6003	HWH Mas Mail	Howrah Jn	Chennai Central
6004	Howrah Mail	Chennai Central	Howrah Jn
6009	Madras Mail	Mumbai Cst	Chennai Central
6010	Mumbai Mail	Chennai Central	Mumbai Cst
6011	CSTM Chennai Exp	Mumbai Cst	Chennai Central
6012	Mumbai Express	Chennai Central	Mumbai Cst
6021	Bangalore Exp	Chennai Central	Bangalore Cy Jn.
6022	Chennai Express	Bangalore Cy Jn	Chennai Central

6031	Andaman Express	Chennai Central	Jammu Tawi
6032	Andaman Express	Jammu Tawi	Chennai Central
6033	Dehradun Exp	Chennai Central	Dehradun
6034	DDN Mas Exp	Dehradun	Chennai Central
6039	Varanasi Exp	Chennai Central	Varanasi Jn
6040	Gangakaveri Exp	Varanasi Jn	Chennai Central
6057	Sapthagiri Exp	Chennai Central	Tirupati
6058	Saptagiri Exp	Tirupati	Chennai Central
6093	Lucknow Exp	Lucknow	Lucknow
6094	LJN Mas Exp	Lucknow	Chennai Central
6123	Anantapuri Exp	Chennai Egmore	Trivandrum Cntl
6124	Anantapuri Exp	Trivandrum Cntl	Chennai Egmore
6215	Chamundi Exp	Mysore Jn	Bangalore Cy Jn
6216	Chamundi Express	Bangalore Cy Jn	Mysore Jn
6231	Mysore Express	Kumbakonam	Mysore Jn
6232	Kumbakonam Exp	Mysore Jn	Kumbakonam
6303	Vanchinad Exp	Eranakulam Jn	Trivanandrum Cntl
6304	Vanchinad Exp	Trivandrum Cntl	Eranakulam Jn
6309	Patna Express	Eranakulam Jn	Patna Jn
6310	Pnbe-Ers Express	Patna Jn	Eranakulam Jn
6311	JU TVC Express	Jodhpur Jn	Trivandrum Cntl
6312	Jodhpur Express	Terivandrum Cntl	Jodhpur Jn
6317	Himsagar Exp	Jammu Tawi	Kanyakumari
6318	Himsagar Exp	Jammu Tawi	Kanyakumari
6321	Trivandrum Exp	Bangalore Cy Jn	Trivandrum Cntl
6322	Bangalore Exp	Trivandrum Cntl	Bangalore Cy Jn
6327	Krba TVC Express	Korba	Trivandrum Cntl
6328	Korba Express	Trivandrum Cntl	Korba
6329	Malabar Exp	Trivandrum Cntl	Mangalore
6330	Malabar Express	Mangalore	Trivandrum Cntl
6331	Trivandrum Exp	Mumbai Cst	Trivandrum Cntl
6332	Mumbai Express	Trivanandrum Cntl	Mumbai Cst
6337	Okha Ers Express	Okha	Ernakulam Jn
6338	Okha Express	Ernakulam	Okha
6339	Nagarcoil Exp	Mumbai Cst	Nagarcoil Jn
6340	Mumbai Express	Nagarcoil Jn	Mumbai Cst
6341	Trivandrum Exp	Ernakulam Jn	Trivandrum Cntl
6342	Ernakulam Exp	Trivandrum Cntl	Eranakulam Jn
6345	Netravati Exp	Lokmanyatilak T	Trivandrum Cntl
6346	Netravathi Exp	Trivandrum Cntl	Lokmanyatilak T
6347	Mangalore Exp	Trivandrum Cntl	Mangalore
6348	Trivandrum Exp	Mangalore	Trivandrum Cntl
6351	Nagarcoil Exp	Mumbai Cst	Nagarcoil Jn
6352	NCJ Mumbai Exp	Nagarcoil Jn	Mumbai Cst

6355	Kannyakumari Exp	Howrah Jn	Kanyakumari
6356	Cape Howrah Exp	Kanyakumari	Howrah Jn
6357	Gurudev Express	Nagarcoil Jn	Howrah Jn
6358	Gurudev Express	Howrah Jn	Nagarcoil Jn
6359	Ers patna Exp	Eranakulam Jn	Patna Jn
6360	RJPB Ers Express	Patna Jn	Eranakulam Jn
6501	Adi Sbc Express	Ahmedabad Jn	Bangalore Cy Jn
6502	Ahmadabad Exp	Bangalore Cy Jn	Ahmedabad Jn
6505	Gimb SBC Express	Gandhidham Bg	Bangalore Cy Jn
6506	Gandhidham Exp	BangaloreCy Jn	Gandhidham Jn
6507	JU Bangalore Exp	Jodhpur Jn	Bangalore Cy Jn
6508	Jodhpur Express	Bangalore Cy Jn	Jodhpur Jn
6509	All SBC Express	Ajmer Jn	Bangalore Cy Jn
6510	Ajmer Express	Banalore Cy Jn	Ajmer Jn
6511	YPR BSP Express	Yesvantpur Jn	Bilaspur Jn
6512	BSP YPR Express	Bilaspur Jn	Yesvantpur Jn
6513	Bijapur Express	Yesvantpur Jn	Bijapur
6514	Gulbarga Exp	BIjapur	Yesvantpur Jn
6523	Bangalore Exp	Chennai Central	Bangalore Cy Jn
6524	Chennai Express	Bangalore Cy Jn	Chennai Central
6525	Bangalore Exp	Kanyakumari	Bangalore Cy Jn
6526	Kanyakumari Exp	Bangalore Cy Jn	Kanyakumari
6528	Yesvantpur Exp	Cannanore	Yesvantpur Jn
6529	Udyan Express	Mumbai Cst	Bangalore Cy Jn
6530	Udyan Exp	Bangalore Cy Jn	Mumbai Cst
6591	Hampi Express	Hubli Jn	Bangalore Cy Jn
6592	Hampi Exp	Bangalore Cy Jn	Hubli Jn
6595	Sanghamitra Exp	Bangalore Cy Jn	Patna Jn
6596	Sangha Mitra Exp	Patna Jn	Yesvantpur Jn
6601	Mangalore Mail	Chennai Central	Mangalore
6602	Chennai Mail	Mangalore	Chennai Central
6603	Maveli Express	Mangalore	Trivandrum Cntl
6604	Maveli Express	Trivandrum Cntl	Mangalore
6607	Coimbatore Exp	Chennai Egmore	Coimbatore Jn
6608	Chennai Express	Coimbatore Jn	Chennai Egmore
6613	Coimbatore Exp	Rajkot Jn	Coimbatore Jn
6614	Rajkot Express	Coimbatore Jn	Rajkot Jn
6627	West Coast Exp	Chennai Central	Mangalore
6628	West Coast Exp	Mangalore	Chennai Central
6669	Yercaud Express	Chennai Central	Erode Jn
6670	Yercaud Exp	Erode Jn	Chennai Central
6687	Navyug Exp	Mangalore	Jammu Tawi
6688	Navyug Express	Jammu Tawi	Mangalore
6701	Rameswaram Exp	Tambaram	Rameswaram

6702	Chennai Express	Rameswaram	Tambaram
6715	Madurai Express	Coimbatore Jn	Coimbatore Jn
6716	Coimbatore Exp	Madurai Jn	Coimbatore Jn
6731	Mysore Exp	Tuticorin	Mysore Jn
6732	Tuticorin Exp	Mysore Jn	Tuticorin
6865	Ernakulam Exp	Tiruchirapalli	Eranakulam Jn
6866	Tiruchchi Exp	Eranakulam Jn	Tiruchchirapali
7001	Husainsagar Exp	Mumbai CST	Hyderabad Deccan
7002	Hussainsagar Exp	Hyderabad Deccan	Mumbai Cst
7007	Godavari Exp	Visakhapatnam	Hyderabad
7008	Godavari Exp	Hyderabad Deccan	Visakhapatnam
7015	Visakha Express	Bhubaneswar	Secunderabad Jn
7016	Visakha Exp	Secunderabd Jn	Bhubaneswar
7017	Rjt Sc Express	Rajkot Jn	Secunderabd Jn
7018	Rajkot Express	Secunderabad Jn	Rajkot Jn
7021	Nizamuddin Exp	Hyderabad Deccan	H. Nizamuddin
7022	Dakshin Express	H Nizamuddin	Hyderabd Deccan
7031	Hydrabad Exp	Mumbai Cst	Hyderabad Decan
7032	Mumbai Exp	Hyderabad Deccan	Mumbai Cst
7037	SC Bkn Exp	Secunderabad Jn	Bikaner Jn
7038	Bkn Sc Exp	Bikaner Jn	Secunderabad Jn
7045	East Coast Exp	Howrah Jn	Hyderabad Deccan
7046	East Coast Exp	Chennai Egmore	Secunderabad Jn
7051	Secunderabad Exp	Chennai Egmore	Secnderabad Jn
7052	SC MS Express	Secunderabad Jn	Chennai Egmore
7053	Hyderabad Exp	Chennai Central	Hyderabad Deccan
7054	Chennai Exp	Hyderabad Deccan	Chennai Central
7057	Devagiri Exp	Mumbai Cst	Secunderabad Jn
7058	Devagiri Exp	Secunderabad Jn	Mumbai Cst
7063	MMR SC Express	Manmad Jn	Secunderabad Jn
7064	Manmad Express	Secunderabad Jn	Manmad Jn
7091	SC Pnbe Express	Secunderabad Jn	Patna Jn
7092	RJPB SC Express	Patna Jn	Secunderabad Jn
7203	Vijayawada Exp	Lokmanyatilak T	Vijyawada Jn
7204	Bza Ltt Express	Vijayawada Jn	Lokmanyatilak T
7225	Amaravathi Exp	Vijayawada Jn	Hubli Jn
7226	Amaravati Exp	Hubli JKn	Vijayawada Jn
7229	Sabari Express	Trivandrum Cntl.	Hyderabad Deccan
7230	Sabari Exp	Hyderabad Deccan	Trivandrum Cntl
7233	Bhavyanangar Exp	Secunderabad Jn	Sirpur Kagazngr
7234	Bhagyanagar Exp	Sirpur Kagazngr	Secunderabad Jn
7239	Simhadri Exp	Guntur Jn	Visakhapatnam
7240	Simhadri Express	Visakhapatnam	Guntur Jn
7309	YPR Vasco Exp	Yesvantpur Jn	Vasco Da Gama

7310	YPR Weekly Exp	Vasco Da Gama	Yesvantpur Jn
7311	Mas Vasco Exp	Chennai Central	Vasco Da Gama
7312	VSG Chennai Exp	Vasco Da Gama	Chennai Central
7313	Mas Hubli Exp	Chennai Central	Hubli Jn
7314	UBL Chennai Exp	Hubli Jn	Chennai Central
7405	Krishna Express	Tirupati	Nizamabad
7406	Krisna Exp	Nizamabad	Tirupati
7416	Haripriya Exp	C Shahumaharaj T	Tirupati
7423	Narayanadri Exp	Tirupati	Secunderabad Jn
7424	Narayandri Exp	Secunderabad Jn	Triuputi
7429	Narayanadri Exp	Hyderabad Jn	Tirupati
7430	Rayalaseema Exp	Tirupati	Hyderabad Deccan
7479	Puri Tpty Exp	Puri	Tirupati
7480	Tpty Puri Exp	Tirupati	Puri
7487	Tirumala Exp	Tirupati	Visakhapatnam
7488	Tirumala Exp	Visakhapatnam	Tirupati
7601	Pune Nanded Exp	Pune Jn	Nanded
7602	Pune Express	Nanded	Pune Jn
7607	Tungabhadra Exp	Secunderabd Jn	Kurnool Town
7608	Tungabhadra Exp	Kurnool Town	Secunderabad Jn
7617	Tapovan Express	Mumbai Cst	Nanded
7618	Tapovan Exp	Nanded	Mumbai Cst
8003	HWH YPR Express	Howrah Jn	Yesvantpur Jn
8004	YPR Howrah Exp	Yesvantpur Jn	Howrah Jn
8007	NWH Puri Exp	Howrah Jn	Puri
808	Puri HWH Exp	Puri	Howrah Jn
8029	HWH Exp Via Ngp	Lokmanyatilak T	Howrah Jn
8030	HWH Kurla Exp	Howrah Jn	Lokmanyatilak T
8033	Howrah Express	Ahmedabad Jn	Howrah Jn
8034	HWH Adi Express	Howrah Jn	Ahmedabad Jn
8101	Tata Jat Exp	Tatanagar Jn	Jammu Tawi
8102	Muri Express	Jammu Tawi	Hatia
8103	Jalianwala B Exp	Tatanagar Jn	Amritsar Jn
8104	Jalianwala B. Exp	Amritsar Jn	Tatanagar Jn
8181	Tata-Cpr Exp	Tatanagar Jn	Alleppey
8201	Durg Gkp Express	Durg	Gorakhpur Jn
8202	Gkp Durg Exp	Gorakhpur Jn	Durg
8203	Durg CNB Express	Durg	Kanpur Central
8204	Betwa Express	Kanpur Central	Durg
8233	Narmada Express	Indore Jn Bg	Bilaspur Jn
8234	Narmada Pas/Exp	Bilaspur Jn	Indore Jn Bg
8237	Chhattisgarh Exp	Amritsar Jn	Amritsar Jn

8238	Chhattisgarh Exp	Durg	Bhopal Jn
8254	Amarkantark Exp	Sambalpur	Puri
8303	SBP Puri Int Exp	Sambalpur	Puri
8304	Puri SBP Int Exp	Puri	Sambalpur
8311	Ispat Express	Howrah Jn	Sambalpur
8312	Ispat Express	Sambalpur	Howrah Jn
8401	Puri-Okha-Exp	Puri	Okha
8402	Okha Puri Exp	Okha	Puri
8403	Puri-Adi Exp	Puri	Ahmedabad Jn
8404	Adi Puri Exp	Ahmedabad Jn	Puri
8409	Srijagannathexp	Howrah Jn	Puri
8410	Srijagannathexp	Puri	Howrah Jn
8411	Inter City Exp	Bhubaneshwar	Visakhapatnam
8412	Inter City Exp	Visakhapatnam	Bhubaneshwar
8449	Baidyadham Exp	Puri	Patna Jn
8450	Pnbe Puri Exp	Patna Jn	Puri
8451	Tapaswini Express	Hatia	Puri
8452	Tapaswini Exp	Puri	Hatia
8473	Puri JP Express	Jaipur	Puri
8475	Neelachal Exp	Puri	New Delhi
8476	Neelachal Exp	New Delhi	Puri
8477	Utkal Express	Puri	Haridwar Jn
8478	Kalingautkalexp	Haridwar Jn	Puri
8507	VSKP NZM HKG Exp	Visakhapatnam	H Nizamuddin
8508	Hirakund Exp	H Nizamuddin	Visakhapatnam
8563	Prsanthi Exp	Visakhapatnam	Bangalore Cy Jn
8564	Prasanthi Exp	Bangalore Cy Jn	Visakhapatnam
8609	RNC BSB Express	Ranchi	Lokmanyatilak T
8610	Ranchi Express	Lokmanyatilak T	Ranchi
8611	RNC BSB Express	Ranchi	Varanasi JN
8612	BSB RNC Express	Varanasi Jn	Ranchi
8613	Hte Ypr Express	Hatia	Yesvantpur Jn
8614	Ypr Hatia Exp	Mumbai Central	Okha
8615	Hwh Hatia Exp	Howrah Jn	Hatia
8616	Hte Rnc Hwh Exp	Hatia	Howrah Jn
9005	Saurashtra Mail	Mumbai Central	Okha
9006	Saurashtra Mail	Okha	Mumbai Central
9007	Aravali Express	Bandra Terminus	Jaipur
9008	Aravali Express	Jaipur	Bandra Terminus
9011	Gujarat Express	Mumbai Central	Ahmedabad Jn
9012	Gujarat Express	Ahmedabad Jn	Mumbai Central
9019	Dehradun Exp	Bandra Terminus	Dehradun

9020	Dehradun Exp	Dehradun	Bandra Terminus
9031	Kutch Express	Mumbai Central	Bhuj
9032	Kutch Express	Bhuj	Mumbai Central
9035	Bdts Surat Exp	Bandra Terminus	Surat
9036	SuratBdts Exp	Surat	Bandra Terminus
9037	Avadh Express	Bandra Terminus	Gorakhpur Jn
9038	Avadh Express	Gorakhpur Jn	Bandra Terminus
9045	Tapti Ganga Exp	Surat	Varanasi Jn
9046	Tapti Ganga Exp	Bandra Terminus	Surat
9049	Bdts Patna Exp	Bandra Terminus	Patna Jn
9050	Pnbe Bdts Exp	Patna Jn	Bandra Terminus
9105	Delhi Mail	Ahmedabad Jn	Delhi
9106	Dli Adi Mail	Delhi	Ahmedabad Jn
9111	Adi Jat Express	Ahmedabad Jn	Jammu Tawi
9112	Jat Adi Express	Jammu Tawi	Ahmedabad Jn
9113	Fzr Jat Express	Firozpur Cant	Jammu Tawi
9114	Jat Fzr Express	Jammu Tawi	Firozpur Cant
9115	Sayajinagari Exp	Bandra Terminus	Bhuj
9116	Bhuj Bots Exp	Bhuj	Bandra Terminus
9143	Lok Shakti Exp	Bandra Terminus	Ahmedabad Jn
9144	Lok Shakti Exp	Ahmedabad Jn	BandraTerminus
9163	Sabarmati Exp	Ahmedabad Jn	Faizabad Jn
9164	Sabarmati Exp	Ahmedabad Jn	Bandra Terminus
9167	Sabarmati Exp	Ahmedabad Jn	Varanasi Jn
9168	Sabarmati Exp	Varanasi Jn	Ahmedabad Jn
9215	Saurashtra Epp	Mumbai Central	Porbandar
9216	Saurashtra Exp	Porbandar	Mumbai Central
9221	Somnath Express	Ahmedabad Jn	Veraval
9222	Somnath Express	Veraval	Ahmedabad Jn
9263	Delhi Sr Express	Porbandar	Delhi Rohilla
9264	Dee Porbndr Exp	Delhi S Rohilla	Porbandar
9265	Uttaranchal Exp	Okha	Dehradun
9266	Uttaranchal Exp	Dehradun	Okha
9305	Shipra Express	Indore-Jn Bg	Howrah Jn
9306	Shipra Exp	Howrah Jn	Indore Jn Bg*
9313	Indb Patna Exp	Inodre Jn Bg	Patna Jn
9314	Rjpb Indb Express	Rjndr Ngr Bihar	Indore Jn Bg
9315	Trishatabdi Exp	Indore Jn Bg	Nagpur
9316	Trishatabdi Exp	Nagpur	Indore Jn Bg
9321	Indb Rjpb Exp	Indore Jn Bg	Rjndr Ngr Bihar
9321	Indb Indb Express	Rjndr Ngr Bihar	Indore Jn Bg
9367	Malwa Express	Indore Jn Bg	Jammu Tawi

9368	Malwa Express	Jammu Tawi	Indore
9569	Okha BSB Express	Okha	Varanasi Jn
9570	BSB Okha Exp	Varanasi Jn	Okha
9679	Ajmer Express	Mumbai Central	Ajmer Jn
9680	All Bct Express	Ajmer Jn	Mumbai Central
9769	JP Purna Express	Jaipur	Purna Jn
9772	Asr Jaipur Exp	Amritsar Jn	Jaipur
9776	Jp Mysore Exp	Jaipur	Mysore Jn

LIST OF STATE-WISE NATIONAL HIGHWAYS IN THE COUNTRY

Sl. No.	Name of State	National Highway No.	Total Length (in km)
1	Andhra Pradesh	4, 5, 7, 9, 16, 18, 43, 63, 202, 205, 214, 214A, 219, 221 & 222	4472
2	Arunachal Pradesh	52, 52A & 153	392
3	Assam	31, 31B, 31C, 36, 37, 37A, 38, 39, 44, 51, 52, 52A, 52B, 53, 54, 61, 62,151,152,153 &154	2836
4	Bihar	2, 2C, 19, 28, 28A, 28B, 30, 30A, 31, 57, 57A, 77, 80, 81, 82, 83, 84, 85, 98, 99, 101, 102, 103, 104, 105, 106, 107 & 110	3642
5	Chandigarh	21	24
6	Chhattisgarh	6, 12A, 16, 43, 78, 200,202, 216, 217, 111, & 221	2184
7	Delhi	1, 2, 8, 10 & 24	72
8	Goa	4A, 17, 17A & 17B	269
9	Gujarat	NE-I, 6, 8, 8A, 8B, 8C, 8D, 8E, 14, 15, 59, 113 & 228	3245
10	Haryana	1, 2, 8, 10, 21A, 22, 64, 65, 71, 71A, 72, 73, 73A , 71B & NE-II	1512
11	Himachal Pradesh	1A, 20, 21, 21A, 22, 70, 72, 88 & 73A	1208
12	Jammu & Kashmir	1A, 1B, 1C &1D	1245
13	Jharkhand	2, 6, 23, 31, 32, 33, 75, 78, 80, 98, 99 & 100	1805
14	Karnataka	4, 4A, 7, 9, 13, 17, 48, 63, 67, 206, 207,209, 212 & 218	3843
15	Kerala	17, 47, 47A, 49, 208, 212, 213, & 220	1440
16	Madhya Pradesh	3, 7, 12, 12A, 25, 26, 26A, 27, 59, 59A, 69, 75, 76, 78, 86 & 92	4670
17	Maharashtra	3, 4, 4B, 4C, 6, 7, 8, 9, 13, 16, 17, 50, 69, 204, 211 & 222	4176
18	Manipur	39, 53, 150 & 155	959
19	Meghalaya	40, 44, 51 & 62	810
20	Mizoram	44A, 54, 54A, 54B, 150 & 154	927
21	Nagaland	36, 39, 61, 150 & 155	494
22	Orissa	5, 5A, 6, 23, 42, 43, 60, 75, 200, 201, 203, 203A, 215, 217 & 224	3704
23	Puducherry	45A & 66	53
24	Punjab	1, 1A, 10, 15, 20, 21, 22, 64, 70, 71, 72 & 95	1557
25	Rajasthan	3, 8, 11, 11A, 11B, 12, 14, 15, 65, 71B, 76, 79, 79A, 89, 90, 113, 112, 114 & 116	5585
26	Sikkim	31A	62
27	Tamil Nadu	4, 5, 7, 7A, 45, 45A, 45B, 45C, 46, 47, 47B, 49, 66, 67, 68, 205,	4462

		207, 208, 209, 210, 219, 220, 226 & 227	
28	Tripura	44 & 44A	400
29	Uttarakhand	58, 72, 72A, 73, 74, 87, 94, 108, 109, 123, 119, 121, 87 Ext. & 125	1991
30	Uttar Pradesh	2, 2A, 3, 7, 11, 12A, 19, 24, 24A, 24B, 25, 25A, 26, 27, 28, 28B, 28C, 29, 56, 56A, 56B, 58, 72A, 73, 74, 75, 76, 86, 87, 91, 91A, 92, 93 ,96, 97 , 119 & NE-II	5874
31	West Bengal	2, 2B, 6, 31, 31A, 31C, 32, 34, 35, 41, 55, 60, 60A, 80, 81& 117	2377
32	Andaman & Nicobar	223	300
		Total	66590

LENGTH OF SOME IMPORTANT INDIAN RIVERS

	River	Length (km)
1.	Indus	2,900
2.	Brahmaputra	2,900
3.	Ganga	2,510
4.	Godavari	1,450
5.	Narmada	1,290
6.	Krishna	1,290
7.	Mahanadi	890
8.	Kaveri	760

AMENDMENTS TO THE CONSTITUTION

1. The Constitution (First Amendment) Act, 1950—This amendment provided for several new grounds of restrictions to the right to freedom of speech and expression and the right to practise any profession or to carry on any trade or business as contained in Article 19 of the Constitution. These restrictions related to public order, friendly relations with foreign States or incitement to an offence in relation to the right to freedom of speech, and to the prescribing of professional or technical qualifications or the carrying on by the State, etc., of any trade, business, industry or service in relation to the right to carry on any trade or business. The amendment also inserted two new Articles, 31A and 31B and the Ninth Schedule to give protection from challenge to land reform laws.

2. The Constitution (Second Amendment) Act, 1952—By this amendment, the scale or representation for election to the Lok Sabha was readjusted.

3. The Constitution (Third Amendment) Act, 1954—This amendment substituted entry 33 of List III (Concurrent List) of the Seventh Schedule to make it correspond to Article 369.

4. The Constitution (Fourth Amendment) Act, 1955—Article 31 (2) of the Constitution was amended to re-state more precisely the State's power of compulsory acquisition and requisitioning of private property and distinguish it from cases where the operation of regulatory or prohibitory laws of the States results in "deprivation of property". Article 31A of the Constitution was also amended to extend its scope to cover categories of essential welfare legislation like abolition of zamindaris, proper planning of urban and rural areas and for effecting a full control over the mineral and oil resources of the country, etc. Six Acts were also included in the Ninth Schedule. Article 305 was also amended to save certain laws providing of State Monopolies.

5. The Constitution (Fifth Amendment) Act, 1955—This amendment made a change in Article 3 so as to empower President to specify a time limit for state legislatures to convey their views on the

proposed Central laws affecting areas, boundaries, etc., of their states.

6. The Constitution (Sixth Amendment) Act, 1956—This amendment made some changes in Articles 269 and 286 relating to taxes on sale and purchase of goods in the course of inter-state trade and commerce. A new entry 92 A was added to the Union List of the Seventh Schedule to the Constitution.

7. The Constitution (Seventh Amendment) Act, 1956—This amendment Act purported to give effect to the recommendations of the State Reorganisation Commission and the necessary consequential changes. Broadly, the then existing states and territories were changed to have two-fold classification of states and union territories. The amendment also provided for composition of the House of the People, re-adjustment after every census, provisions regarding the establishment of new High Courts, High Court Judges, etc.

8. The Constitution (Eighth Amendment) Act, 1960—Article 334 was amended with a view to extending the period of reservation of seats for Scheduled Castes and Scheduled Tribes and to the Anglo-Indian community by nomination in Parliament and in the State Legislatures for a further period of ten years.

9. The Constitution (Ninth Amendment) Act, 1960—The purpose of this amendment is to give effect to the transfer of certain territories to Pakistan in pursuance of the agreement extended into between Governments of India and Pakistan. This amendment was necessitated in view of the Judgement of Supreme Court in In Re Berubari Union by which it was held that any agreement to cede a territory to another country could not be implemented by a law made under Article 3 but would only be implemented by an amendment of the Constitution.

10. The Constitution (Tenth Amendment) Act, 1961—This Act amended Article 240 and the First Schedule in order to include areas of Dadra and Nagar Haveli as a Union Territory and to provide for its administration under the regulation making powers of President.

11. The Constitution (Eleventh Amendment) Act, 1961—The purpose of this amendment was to amend Articles 66 and 71 of the Constitution to provide that the election of President or Vice President could not be challenged on the ground of any vacancy in the appropriate electoral college.

12. The Constitution (Twelfth Amendment) Act, 1962—This amendment sought to include Goa, Daman and Diu as a Union Territory and to amend Article 240 for the purpose.

13. The Constitution (Thirteenth Amendment) Act, 1962—By this amendment, a new Article 371A was added to make special provisions with respect to state of Nagaland in pursuance of an agreement between Government of India and Naga People's Convention.

14. The Constitution (Fourteenth Amendment) Act, 1962—By this Act, Pondicherry was included in the First Schedule as a Union Territory, and this Act has also enabled the creation of Legislature by Parliamentary law for Himachal Pradesh, Manipur, Tripura, Goa, Daman and Diu and Pondicherry.

15. The Constitution (Fifteenth Amendment) Act, 1963—This amendment provided for increase in the age of retirement of High Court Judge and for the provision of compensatory allowance to judges who are transferred from one High Court to another. The Act also provided for appointment of retired judges to act as judges of High Court. Article 226 was also enlarged to empower High Court to issue direction, orders or writs to any Government authority, etc., if the cause of action for the exercise of such power arose in the territories wherein the High Court exercise jurisdiction notwithstanding that seat of such Government authority is not within those territories. The Act also provided for the exercise of powers of Chairman of the Service Commissions, in their absence, by one of their Members.

16. The Constitution (Sixteenth Amendment) Act, 1963—Article 19 was amended by this Act to impose further restriction on the rights to freedom of speech and expression, to assemble peaceably and without arms and to form associations in the interests of sovereignty and integrity of India. The oath of affirmation to be subscribed by candidates seeking election to Parliament and State Legislatures have been amended to include as one of the conditions that they will uphold the sovereignty and integrity of India. The amendments are intended to promote national integration.

17. The Constitution (Seventeenth Amendment) Act, 1964—Article 31A was further amended to prohibit the acquisition of land under personal cultivation unless the market value of the land is paid as compensation and the definition of "estate" as contained in that Article had also been enlarged with retrospective effect. The Ninth Schedule had also been amended to include 44 more Acts.

18. The Constitution (Eighteenth Amendment) Act, 1966—Article 3 was amended by this Act to specify that the expression "State" will include a union territory also and to make it clear that the power to form a new state under this Article includes a power to form a new state or union territory by uniting a part of a state or a union territory to another state or union territory.

19. The Constitution (Nineteenth Amendment) Act, 1966—Article 324 was amended to effect a consequential change as a result of the decision to abolish Election Tribunals and to hear election petitions by High Courts.

20. The Constitution (Twentieth Amendment) Act, 1966—This amendment was necessitated by the decision of the Supreme Courts in Chandramohan vs. State of Uttar Pradesh in which certain appointments of District Judges in State of Uttar Pradesh were declared void by Supreme Court. A new Article 233A was added and the appointments made by Governor were validated.

21. The Constitution (Twenty-first Amendment) Act, 1967—By this amendment, Sindhi Language was included in the Eighth Schedule.

22. The Constitution (Twenty-second Amendment) Act, 1969—This act was enacted to facilitate the formation of a new autonomous state of Meghalaya within state of Assam.

23. The Constitution (Twenty-third Amendment) Act, 1969—Article 334 was amended so as to extend the safeguards in respect of reservation of seats in Parliament and State Legislatures for Schedules Castes and Scheduled Tribes as well as for Anglo-Indians for a further period of ten years.

24. The Constitution (Twenty-fourth Amendment) Act, 1971—This amendment was passed in the context of a situation that emerged with the verdict in Golaknath's case by Supreme Court. Accordingly, this Act amended Article 13 and Article 368 to remove all doubts regarding the power of Parliament to amend the Constitution including the Fundamental Rights.

25. The Constitution (Twenty-fifth Amendment) Act, 1971—This amendment further amended Article 31 in the wake of the Bank Nationalisation case. The word 'amount' was substituted in place of 'compensation' in the light of the judicial interpretation of the word 'compensation' meaning 'adequate compensation'.

26. The Constitution (Twenty-sixth Amendment) Act, 1971—By this amendment, the privy and privileges of the former rulers of Indian states were abolished. This amendment was passed as a result of Supreme Court decision in Madhav Rao's case.

27. The Constitution (Twenty-seventh Amendment) Act, 1971—This amendment was passed to provide for certain matters necessitated by the reorganisation of north-eastern states. A new Article 239B was inserted which enabled the promulgation of Ordinances by Administrators of certain union territories.

28. The Constitution (Twenty-eighth Amendment) Act, 1972—The amendment was enacted to abolish the special privileges of the members of Indian Civil Services in matters of leave, pension and rights as regard to disciplinary matters.

29. The Constitution (Twenty-ninth Amendment) Act, 1972—The Ninth Schedule to the Constitution was amended to include therein two Kerala Acts on land reforms.

30. The Constitution (Thirtieth Amendment) Act, 1972—The purpose of the amendment was to amend Article 133 in order to do away with the valuation test of Rs 20,000 as fixed therein, and to provide instead for an appeal to Supreme Court in Civil proceedings only on a certificate issued by High Court that the case involves a substantial question of law of general importance and that in opinion of High Court, the question needs to be decided by Supreme Court.

31. The Constitution (Thirty-first Amendment) Act, 1973—This Act inter alia raises the upper limit for the representation of states in the Lok Sabha from 500 to 525 and reducing the upper limit for the representation of union territories from 25 members to 20.

32. The Constitution (Thirty-second Amendment) Act, 1973—This Act provided the necessary constitutional authority for giving effect to the provision of equal opportunities to different areas of the State of Andhra Pradesh and for the constitution of an Administrative Tribunal with jurisdiction to deal with grievances relating to public services. It also empowered Parliament to legislate for the establishment of a Central university in the State.

33. The Constitution (Thirty-third Amendment) Act, 1974—By this amendment, Articles 101 and 190 were amended in order to streamline the procedure for resignation of Members of Parliament and State Legislatures.

34. The Constitution (Thirty-fourth Amendment) Act, 1974—By this Act, twenty more land tenure and land reforms laws enacted by various State Legislatures were included in the Ninth Schedule.

35. The Constitution (Thirty-fifth Amendment) Act, 1974—By this Act a new Article 2A was added thereby conferring on Sikkim the status of an associate State of Indian Union. Consequent amendments were made to Articles 80 and 81. A new schedule, i.e., Tenth Schedule, was added laying down terms and conditions of association of Sikkim with the Union.

36. The Constitution (Thirty-sixth Amendment) Act, 1975—This was enacted to make Sikkim a full-fledged State of Indian Union and to include it in the First Schedule to the Constitution and to allot to Sikkim one seat each in the Council of States and in the House of the People. Article 2A and the Tenth Schedule inserted by the Constitution (Thirty-fifth Amendment) Act were omitted and Articles 80 and 81 were suitably amended.

37. The Constitution (Thirty-seventh Amendment) Act, 1975—By this Act, Union Territory of Arunachal Pradesh was provided with a Legislative Assembly. Article 240 of the Constitution was also amended to provide that as in the case of other union territories with Legislatures, the power of President to make regulations for the Union Territory of Arunachal Pradesh may be exercised only when the assembly is either dissolved or its functions remain suspended.

38. The Constitution (Thirty-eighth Amendment) Act, 1975—This Act amended Articles 123, 213 and 352 of the Constitution to provide that the satisfaction of President or Governor contained in these Articles would be called in question in any court of law.

39. The Constitution (Thirty-ninth Amendment) Act, 1975—By this Act, disputes relating to the election of President, Vice-President, Prime Minister and Speaker are to be determined by such authority as may be determined by Parliamentary Law. Certain Central enactments were also included in the Ninth Schedule by this Act.

40. The Constitution (Fortieth Amendment) Act, 1976—This act provided for vesting in the Union of all mines, minerals and other things of value lying in the ocean within the territorial waters or the continental shelf or the exclusive economic zone of India. It further provided that all other resources of the exclusive economic zone of India shall also vest in the Union. This act also provided that the limits of the territorial waters, the continental shelf, the exclusive economic zone and the maritime zones of India shall be as specified from time to time by or under any law made by Parliament. Also some more Acts were added to the Ninth Scheme.

41. The Constitution (Forty-first Amendment) Act, 1976—By this Act, Article 316 was amended to raise the retirement age of Members of State Public Service Commissions and Joint Public Service Commissions from 60 to 62 years.

42. The Constitution (Forty-second Amendment) Act, 1976—This act made a number of important amendments in the Constitution. These amendments were mainly for purpose of giving effect to the recommendations of Swaran Singh Committee.

Some of the important amendments made are for the purpose of spelling out expressly the high ideals of socialism, secularism and the integrity of the nation, to make the Directive Principles more comprehensive and giving them precedence over those Fundamental Rights which have been allowed to be relied upon to frustrate socio-economic reforms. The amendment Act also inserted a new chapter on the Fundamental Duties of citizens and made special provisions for dealing with anti-national activities, whether by individuals or by associations. The judiciary provisions were also amended by providing for a requirement as to the minimum number of judges for determining question as to the constitutional validity of law and for a special majority of not less than two-third for declaring any law to be constitutionally invalid.

To reduce the mounting arrears in High Courts and to secure the speedy disposal of service matters, revenue matters and certain other matters of special importance in the context of socio-economic development and progress, this amendment Act provided for the creation of Administrative and other tribunals for dealing with such matters while preserving the jurisdiction of the Supreme Court in regard to such matters under Article 136 of the Constitution. Certain modifications in the writ jurisdiction of

High Courts under Article 226 were also made.

43. The Constitution (Forty-third Amendment) Act, 1977—This Act inter alia provided for the restoration of the jurisdiction of the Supreme Court and High Courts, curtailed by the enactment of the Constitution (Forty-second Amendment) Act, 1976 and accordingly Articles 32A, 131A, 144A, 226A and 228A included in the Constitution by the said amendment, were omitted by this Act. The Act also provided for the omission of Article 31 which conferred special powers on Parliament to enact certain laws in respect of anti-national activities.

44. The Constitution (Forty-fourth Amendment) Act, 1978—The right to property which had been the occasion for more than one amendment of Constitution was omitted as a Fundamental Right and it was made only as a legal right. It was, however, ensured that the removal of the right to property from the list of Fundamental Rights would not affect the right of minorities to establish and administer educational institutions of their choice. Article 352 of the Constitution was amended to provide "armed rebellion" as one of the circumstances for declaration of emergency. Internal disturbance not amounting to armed rebellion would not be a ground for the issuance of a Proclamation. The right to personal liberty as contained in Articles 21 and 22 is further strengthened by the provision that a law for preventive detention cannot authorise, in any case, detention for a longer period than two months unless an Advisory Board has reported that there is sufficient cause for such detention. The additional safeguard has also been provided by the requirements that Chairman of an Advisory Board shall be a serving Judge of the appropriate High Court and that the Board shall be constituted in accordance with the recommendations of the Chief Justice of that High Court.

With a view to avoiding delays, Articles 132 and 134 were amended and a new Article 134A was inserted to provide that a High Court should consider the question of granting a certificate for appeal to Supreme Court immediately after the delivery of the judgement, final order or sentence concerned on the basis of an oral application by a party or, if the High Court deems it so to do, on its own. The other amendments made by the Act are mainly for removing or correcting the distortions which came into the Constitution by reason of the amendment initiated during the period of internal emergency.

45. The Constitution (Forty-fifth Amendment) Act, 1980—This was passed to extend safeguards in respect of reservation of seats in Parliament and State Assemblies for Scheduled Castes, Scheduled Tribes as well as for Anglo-Indians for a further period of ten years.

46. The Constitution (Forty-sixth Amendment) Act, 1982—Article 269 was amended so that the tax levied on the consignment of goods in the course of inter-state or commerce shall be assigned to the states. This Article was also amended to enable Parliament to formulate by law principle for determining when a consignment of goods takes place in the course of inter-state trade or commerce. A new entry 92B was also inserted in the Union List to enable the levy of tax on the consignment of goods where such consignment takes place in the course of inter-state trade or commerce.

Clause (3) of Article 286 was amended to enable Parliament to specify, by law, restrictions and conditions in regard to the system of levy rates and other incidence of tax on the transfer of goods involved in the execution of a works contract, on the delivery of goods on hire-purchase or any system of payment of instalments, etc.

Article 366 was also suitably amended to insert a definition of "tax on the sale or purchase of goods" to include transfer for consideration of controlled commodities, transfer of property in goods involved in the execution of a works contract, delivery of goods on hire-purchase or any system of payment by instalments, etc.

47. The Constitution (Forty-seventh Amendment) Act, 1984—This amendment is intended to provide for the inclusion of certain land Reforms Acts in the Ninth Schedule to the Constitution with a view to obviating the scope of litigation hampering the implementation process of those Acts.

48. The Constitution (Forty-eighth Amendment) Act, 1984—The Proclamation issued by President under Article 356 of the Constitution with respect to the State of Punjab cannot be continued in force for more than one year unless the special conditions mentioned in clause (5) of the said Article are satisfied. As it is felt that the continued force of the said Proclamation is necessary, therefore, the present amendment had been effected so as to make the conditions mentioned in clause (5) of Article 356 inapplicable in the instant case.

49. The Constitution (Forty-ninth Amendment) Act, 1984—Tripura Government recommended that

the provisions of the Sixth Schedule to the Constitution may be made applicable to tribal areas of that State. The amendment involved in this Act is intended to give a constitutional security to the autonomous District Council functioning in the State.

50. The Constitution (Fiftieth Amendment) Act, 1984—by Article 33 of the constitution, Parliament is empowered to enact laws determining to what extent any of the rights conferred by Part III of the constitution shall, in their application to the members of the armed forces or the forces charged with the maintenance of public order, be restricted or abrogated so as to ensure proper discharge of their duties and maintenance of discipline among them.

It was proposed to amend Article 33 so as to bring within its ambit:

(i) the members of the Force charged with the protection of property belonging to or in the charge or possession of the state; or

(ii) persons employed in any bureau or other organisation established by the state for purposes of intelligence or counter-intelligence; or

(iii) persons employed in or in connection with the telecommunication systems set up for the purposes of any Force, bureau or organisation.

Experience has revealed that the need for ensuring proper discharge of their duties and maintenance of discipline among them is of paramount importance in the national interest.

51. The Constitution (Fifty-first Amendment) Act, 1984—Article 330 has been amended by this Act for providing reservation of seats for Scheduled Tribes in Meghalaya, Nagaland, Arunachal Pradesh and Mizoram in Parliament and Article 332 has been amended to provide similar reservation in the Legislative Assemblies of Nagaland and Meghalaya to meet the aspirations of local tribal population.

52. The Constitution (Fifty-second Amendment) Act, 1985—It amends the Constitution to provide that a Member of Parliament or a State Legislature who defects or is expelled from the party which set him up as a candidate in the election or if an independent member of the House joins a political party after expiry of six months from the date on which he takes seat in the House shall be disqualified to remain a member of the House. The Act also makes suitable provisions with respect to splits in and merger of political parties.

53. The Constitution (Fifty-third Amendment) Act, 1986—This has been enacted to give effect to the Memorandum of Settlement of Mizoram which was signed by Government of India and Mizoram Government with Mizoram National Front on 30 June 1986. For this purpose, a new Article 371G has been inserted in the Constitution inter alia preventing application of any Act of Parliament in Mizoram in respect of religious or social practices of Mizos, Mizos' customary law and procedure, administration of civil and criminal practice involving decisions according to Mizos' customary law and ownership and transfer of land unless a resolution is passed in the Legislative Assembly to that effect. This, however, will not apply to any Central Act already in force in Mizoram before the commencement of this amendment. The new Article also provides that the Legislative Assembly of Mizoram shall consist of not less than 40 members.

54. The Constitution (Fifty-fourth Amendment) Act, 1986—This Act increases the salaries of Supreme Court and High Court judges as follows :

Chief Justice of India	Rs 10,000 per month
Judges of Supreme Court	Rs 9,000 per month
Chief Justice of High Court	Rs 9,000 per month
Judges of High Court	Rs 8,000 per month

This Act amended Part 'D' of the Second Schedule to the Constitution to give effect to the above increases in the salaries of judges and to make an enabling provision in Articles 125 and 221 to provide for changes in the salaries of judges in future by Parliament by law.

55. The Constitution (Fifty-fifth Amendment) Act, 1986—This Act seeks to give effects to the proposal of Government of India to confer statehood on the Union Territory of Arunachal Pradesh and for this purpose, a new Article 371H has been inserted which, inter alia, confers, having regard to the sensitive location of Arunachal Pradesh to vest special responsibility on Governor of the new State of Arunachal

Pradesh with respect to law and order in the State and in the discharge of his functions, the Governor shall after consulting the Council of Ministers, exercise his individual judgement, as to the action to be taken and this responsibility shall cease when President so directs. The new Article also provides that the new Legislative Assembly of the new State of Arunachal Pradesh, shall consist of not less than thirty members.

56. The Constitution (Fifty-sixth Amendment) Act, 1987—Government of India has proposed to constitute the territories comprised in Goa District of the Union Territory of Goa, Daman and Diu as the State of Goa and the territories comprised in Daman and Diu districts of that Union Territory as a new Union Territory of Daman and Diu. In this context, it was proposed that the Legislative Assembly of the new State of Goa shall consist of 40 members. The existing Legislative Assembly of the Union Territory of Goa, Daman and Diu has 30 elected members and three nominated members. It was intended to make this Assembly with the exclusion of two members representing Daman and Diu districts the provisional Legislative Assembly for the new State of Goa until elections are held on the expiry of the five year terms of the existing Assembly. It was, therefore, decided to provide that the Legislative Assembly of the new State of Goa shall consist of not less than 30 members. The special provision required to be made to give effect to this proposal is carried out by this amendment.

57. The Constitution (Fifty-seventh amendment) Act, 1987—The Constitution (Fifty-first Amendment) Act, 1984 was enacted to provide for reservation of seats in the house of the people for scheduled tribes in Nagaland, Meghalaya, Mizoram and Arunachal Pradesh and also for reservation of seats for scheduled tribes in the legislative assemblies of Nagaland and Meghalaya by suitably amending articles 330 and 332. Even though these states are predominantly tribal, the underlying objective of the aforesaid act was to ensure that the members of scheduled tribes in these areas do not fail to secure a minimal representation because of their inability to compete with the advanced sections of the people. The Constitution (fifty-first amendment) act, though formally enforced, could not be fully implemented unless parallel action is taken to determine the seats which are to be reserved for Scheduled tribes in these areas. The number of seats reserved for Schedule Castes and Schedule Tribes in the Legislative Assembly of any State under article 332 of the constitution will have to be determined having regard to the provisions of article 332 (3) of the Constitution. However, in view of the historical background with respect to the areas comprised in north-eastern states, the circumstances obtaining in these areas in the State of development of Scheduled Tribes and other relevant considerations, it was considered necessary to provide for special arrangements with regard to the reservation for Scheduled Tribes in these areas for a temporary period so as to facilitate easy transition of these areas to the normal arrangements as envisaged in the Constitution. Article 332 of the Constitution was further amended for making a temporary provision, until the re-adjustment of seats on the basis of first census after the year 2000 under article 170 of the Constitution for these states, for the determination of the number of seats reserved for Scheduled Tribes. This amendment seeks to provide that if all the seats in the Legislative Assembly of such States in existence on the date of coming into force of this constitution amendment act are held by the members of Scheduled Tribes, all the seats except one shall be reserved for scheduled tribes and in any other case such number of seats as bears to the total number of seats a proportion not less than the number of members belonging to Scheduled Tribes in the existing assembly bears to the total number of seats in the existing assembly. The act achieves these objectives.

58. The Constitution (Fifty-eighth Amendment) Act, 1987—There has been general demand for the publication of authoritative text of the Constitution in Hindi. It is imperative to have an authoritative text of the Constitution for facilitating its use in the legal process. Any Hindi version of the Constitution should not only conform to the Hindi translation published by the Constituent Assembly, but should be in conformity, with the language style and terminology adopted in the authoritative texts of Central Acts in Hindi. The Constitution has been amended to empower President of India to publish under his authority the translation of the Constitution in Hindi signed by the Members of the Constituent Assembly with such modification as may be necessary to bring it in conformity with the language, style and terminology adopted in the authoritative texts of Central Acts in Hindi language. President has also been authorised to publish the translation in Hindi of every amendment of the Constitution made in English.

59. The Constitution (Fifty-ninth Amendment) Act, 1988—The Act amends Article 365 (5) of the Constitution so as to facilitate the extension of a Presidential Proclamation issued under clause (1) of Article 356 beyond a period of one year, if necessary upto a period of three years, as permissible under clause (4) of Article 356 with respect to the State of Punjab because of the continued disturbed situation

there. The Act also amends Article 352 of the Constitution pertaining to the Proclamation of emergency in its application to the State of Punjab and includes internal disturbance as one of the grounds for making a Proclamation in respect of the State of Punjab only. As a consequence of amendment in Article 352, Articles 358 and 359 in relation to the State of Punjab will be operative only for a period of two years from 30 March 1988, which is the date of commencement of the amendment.

60. The Constitution (Sixtieth Amendment) Act, 1988—The Act amends clause (2) of Article 276 of the Constitution so as to increase the ceiling of taxes on professions, trades, callings and employment from Rs 250 per annum to Rs 2,500 per annum. The upward revision of this tax will help state governments in raising additional resources. The proviso to clause (2) has been omitted.

61. The Constitution (Sixty-first Amendment) Act, 1989—The Act provides for reducing voting age from 21 to 18 years by amending Article 326 of the Constitution to provide to the unrepresented youth of the country an opportunity to give vent to their feelings and help them become a part of political process.

62. The Constitution (Sixty-second Amendment) Act, 1989—Article 334 of the Constitution lays down that the provisions of the Constitution relating to the reservation of seats for the Scheduled Castes and the Scheduled Tribes and the representation of the Anglo-Indian community by nomination in the Lok Sabha and in the Legislative Assemblies of the States shall cease to have effect on the expiry of a period of 40 years from the commencement of the Constitution. Although the Scheduled Castes and the Scheduled Tribes have made considerable progress in the last 40 years, the reasons which weighed with the Constituent Assembly in making provisions with regard to the aforesaid reservation of seats and nomination of members, have not ceased to exist. The Act amends Article 334 of the Constitution to continue the reservation for the Scheduled Castes and the Scheduled Tribes and the representation of the Anglo-Indians by nomination for a further period of 10 years.

63. The Constitution (Sixty-third Amendment) Act, 1989—The Constitution (Fifty-ninth Amendment) Act, 1988 was enacted in March 1988 making certain changes in regard to making a Proclamation of Emergency in Punjab and to the duration of President's rule in State. On reconsideration, the Government decided that the special powers in regard to the Proclamation of Emergency in Punjab as envisaged in the said amendment is no longer required. Accordingly the provision to clause (5) of Article 356 and Article 359A of the Constitution have been omitted.

64. The Constitution (Sixty-fourth Amendment) Act, 1990—This Act amends clauses (4) and (5) of Article 356 of the Constitution with a view to facilitate the extension of the proclamation issued under clause (1) of Article 356 of the Constitution on 11 May 1987 upto a total period of three years and six months in relation to the State of Punjab.

65. The Constitution (Sixty-fifth Amendment) Act, 1990—Article 338 of the Constitution provides for a Special Officer for the Scheduled Castes and Scheduled Tribes to investigate all matters relating to the safeguards provided for the Scheduled Castes and Scheduled Tribes under the Constitution and to report to the President on their working. The Article has been amended for the constitution of a National Commission for Scheduled Castes and Scheduled Tribes consisting of a Chairperson, Vice Chairperson and five other Members who shall be appointed by the President by warrant under his hand and seal. The amended Article elaborates the duties of the said Commission and covers measures that should be taken by the Union or any state for the effective implementation of the reports presented by the Commission. It also provides that the Commission shall, while investigating any matter or inquiring into any complaint have all the powers of a Civil Court trying a suit and the reports of the said Commission shall be laid before Parliament and the Legislature of the states.

66. The Constitution (Sixty-sixth Amendment) Act, 1990—The Act protects 55 State Acts relating to land reforms and ceiling on agricultural land holdings enacted by States of Andhra Pradesh, Bihar, Gujarat, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan,Tamil Nadu, Uttar Pradesh, West Bengal and administration of the Union Territory of Pondicherry, from challenge in courts, by including them in the Ninth Schedule to the Constitution.

67. The Constitution (Sixty-seventh Amendment) Act, 1990—The three year period in the case of proclamation issued on 11 May 1987 with respect to the State of Punjab was extended to three years and six months by the Constitution (Sixty-fourth Amendment) Act, 1990. This Act further amends clause (4) of Article 356 so as to further extend the period upto a total period of four years.

68. The Constitution (Sixty-eighth Amendment) Act, 1991—The three year period in the case of proclamation issued on 17 May 1987 with respect to the State of Punjab was earlier extended to four years by the Constitution (sixty-seventh Amendment) Act, 1990. This Act further amends clause (4) of Article 356 so as to further extend the period upto a total period of five years.

69. The Constitution (Sixty-ninth Amendment) Act, 1991—The Government of India appointed on 24 December 1987 a Committee to go into various issues connected with the administration of Delhi and to recommend measures, inter alia for the streamlining of the administrative set up. After detailed inquiry and examination, it recommended that Delhi should continue to be a union territory and may be provided with a Legislative Assembly and a Council of Ministers responsible to such assembly with appropriate powers to deal with matters of concern to the common man. The Committee also recommended that with a view to ensuring stability and permanence, arrangements should be incorporated in the constitution to give the national capital a special status among the union territories. This act has been passed to give effect to the above recommendations.

70. The Constitution (Seventieth Amendment) Act, 1992—While considering the (Seventy-fourth Amendment) Bill, 1991 and the Government of National Capital Territory Bill, 1991 views were expressed in both the Houses of Parliament in favour of including also the elected members of the legislative assemblies of union territories in the electoral college for the election of the President under Article 54 of the Constitution.

At present Article 54 relating to the election of the President provides for an electoral college consisting of only the elected Members of Parliament as well as the legislative assemblies of the states (not of union territories). Similarly, Article 55 providing for the manner of such election also speaks of legislative assemblies of states.

Accordingly, an Explanation was inserted in Article 54 to provide that reference to 'State' in Article 54 and 55 would include the National Capital Territory of Delhi and the Union Territory of Pondicherry for constituting the electoral college for election of the President. This would enable the elected members of the Legislative Assembly created for the Union Territory of Pondicherry under the provisions of Article 239A and of the proposed Legislative Assembly of the National Capital Territory of Delhi under Article 239AA to be included in the electoral college.

71. The Constitution (Seventy-first Amendment) Act, 1992—There have been demands for inclusion of certain languages in the Eighth Schedule to the Constitution. This Act amends the Eighth Schedule to the Constitution to include Konkani, Manipuri and Nepali languages in the Eighth Schedule to the Constitution.

72. The Constitution (Seventy-second Amendment) Act, 1992—For restoring peace and harmony in the areas of the State of Tripura where disturbed conditions prevailed, a Memorandum of Settlement was signed by the Government of India with Tripura National Volunteers on 12 August 1988.

In order to implement the said Memorandum, Article 332 of the Constitution has been amended by the Constitution (Seventy-second Amendment) Act, 1992 for making a temporary provision for the determination of the number of seats reserved for the Scheduled Tribes in the State Assembly of Tripura, until the re-adjustment of seats is made on the basis of the first Census after the year 2000 under Article 170 of the Constitution.

73. The Constitution (Seventy-third Amendment) Act, 1993—Article 40 of the Constitution which enshrines one of the Directive Principles of State Policy lays down that the State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government.

In the light of the above, a new Part IX relating to the Panchayats has been inserted in the Constitution to provide for among other things, Gram Sabha in a village or group of villages; constitution of Panchayats at village and other level or levels; direct elections to all seats in Panchayats at the village and intermediate level, if any and to the offices of Chairpersons of Panchayats at such levels; reservation of seats for the Scheduled Castes and Scheduled Tribes in proportion to their population for membership of Panchayats and office of Chairpersons in Panchayats at each level; reservation of not less than one-third of the seats for women; fixing tenure of five years for Panchayats and holding elections within a period of six months in the event of supersession of any Panchayat.

74. The Constitution (Seventy-fourth Amendment) Act, 1993—In many states local bodies have

become weak and ineffective on account of a variety of reasons, including the failure to hold regular elections, prolonged supersession and inadequate devolutions of powers and functions. As a result, Urban Local Bodies are not able to perform effectively as vibrant democratic units of self-government.

Having regard to these inadequacies a new part IX-A relating to the Municipalities has been incorporated in the Constitution to provide for among other things, constitution of three types of Municipalities, i.e., Nagar Panchayats for areas in transition from a rural area to urban area, Municipal Councils for smaller urban areas and Municipal Corporations for larger urban areas.

75. The Constitution (Seventy-fifth Amendment) Act, 1994—The operation of the Rent Control Legislations, as are today in various states, suffers from major weaknesses and has led to various unintended consequences. Some of the deleterious legal consequences include mounting and mending litigation, inability of the courts to provide timely justice, evolution of practices and systems to bypass the operations of rent legislations and steady shrinkage of rental housing market.

The Supreme Court taking note of the precarious state of rent litigation in the country in case of Prabhakaran Nair and others vs. State of Tamil Nadu (Civil Writ Petition 506 of 1986) and other writs observed that the Supreme Court and the High Courts should be relieved of the heavy burden of rent litigation. Tiers of appeals should be curtailed. Laws should be simple, rational and clear, litigations must come to end quickly.

Therefore, this Act amends Article 323B in Part XIVA of the Constitution so as to give timely relief to the rent litigants by providing for setting up of state-level Rent Tribunals in order to reduce the tiers of appeals and to exclude the jurisdiction of all courts, except that of the Supreme Court, under Article 136 of the Constitution.

76. The Constitution (Seventy-sixth Amendment) Act, 1994—The policy of reservation of seats in educational institutions and reservation of appointments or posts in public services for Backward Classes, Scheduled Castes and Scheduled Tribes has had a long history in Tamil Nadu dating back to the year 1921. The extent of reservation has been increased by the State Government from time to time, consistent with the needs of the majority of the people and it has now reached the level of 69 per cent (18 per cent Scheduled Castes, one per cent Scheduled Tribes and 50 per cent Other Backward Classes).

The Supreme Court in Indira Sawhney and others vs. Union of India and others (AIR, 1993 SC 477) on 16 November 1992 ruled that the total reservations under Article 16(4) should not exceed 50 per cent.

The Tamil Nadu Government enacted a legislation, namely, Tamil Nadu Backward Classes, Scheduled Castes and Scheduled Tribes (Reservation of Seats in Educational Institution and of appointments or posts in the Services under the State) Bill, 1993 and forwarded it to the Government of India for consideration of the President of India in terms of Article 31-C of the Constitution. The Government of India supported the provision of the State legislation by giving the President's assent to the Tamil Nadu Bill. As a corollary to this decision, it was necessary that the Tamil Nadu Act 45 of 1994 was brought within the purview of the Ninth Schedule to the Constitution so that it could get protection under Article 31B of the Constitution with regard to the judicial review.

77. The Constitution (Seventy-seventh Amendment) Act, 1995—The Schedule Castes and the scheduled tribes have been enjoying the facility of reservation in promotion since 1955. The Supreme Court in its judgment dated 16 November 1992 in the case of Indira Sawhney and others vs. Union of India and others, however, observed that reservation of appointments or posts under Article 16(4) of the Constitution is confined to initial appointment and cannot extend to reservation in the matter of promotion. This ruling of the Supreme Court will adversely affect the interests of the Scheduled Castes and the Scheduled Tribes. Since the representation of the Scheduled Castes and the Scheduled Tribes in services in the States have not reached the required level, it is necessary to continue the existing dispensation of providing reservation in promotion in the case of the Scheduled Castes and the Scheduled Tribes. In view of the commitment of the Government to protect the interests of the Scheduled Castes and the Scheduled Tribes, the Government have decided to continue the existing policy of reservation in promotion for the Scheduled Castes and the Scheduled Tribes. To carry out this, it was necessary to amend Article 16 of the Constitution by inserting a new clause (4A) in the said Article to provide for reservation in promotion for the Scheduled Castes and the Scheduled Tribes.

78. The Constitution (Seventy-eighth Amendment) Act, 1995—Article 31B of the Constitution confers

on the enactments included in the Ninth Schedule to the Constitution immunity from legal challenge on the ground that they violate the fundamental rights enshrined in Part III of the Constitution. The Schedule consists of list of laws enacted by various state governments and Central Government which inter alia affect rights and interest in property including land.

In the past, whenever, it was found that progressive legislation conceived in the interest of the public was imperilled by litigation, recourse was taken to the Ninth Schedule. Accordingly, several State enactments relating to land reforms and ceiling on agricultural land holdings have already been included in the Ninth Schedule. Since the Government is committed to give importance to land reforms, it was decided to include land reform laws in the Ninth Schedule so that they are not challenged before the courts. The state governments of Bihar, Karnataka, Kerala, Orissa, Rajasthan, Tamil Nadu and West Bengal had suggested the inclusion of some of their Acts relating to land reforms in the Ninth Schedule.

Since the amendment to Acts which are already placed in the Ninth Schedule are not automatically immunised from legal challenge, a number of amending Acts along with a few principal Acts have been included in the Ninth Schedule so as to ensure that implementation of these Acts is not adversely affected by litigation.

79. The Constitution (Seventy-ninth Amendment) Act, 1999—By this Act the Government has extended the reservations of seats for the Scheduled Castes and the Scheduled Tribes as well as for the Anglo-Indians in the House of the People and in the Legislative Assemblies of the States for another ten years.

80. The Constitution (Eightieth Amendment) Act, 2000—Based on the recommendations of the Tenth Finance Finance Commission, an alternative scheme for sharing taxes between the Union and the States has been enacted by the Constitution (Eightieth Amendment) Act 2000. Under the new scheme of devolution of revenue between Union and the States, 26 per cent out of gross proceeds of Union taxes and duties is to be assigned to the States in lieu of their existing share in the income-tax, excise duties, special excise duties and grants in lieu of tax on railway passenger fares.

81. The Constitution (Eighty-first Amendment) Act, 2000—By this amendment the unfilled vacancies of a year which were reserved for the Scheduled Castes and the Scheduled Tribes for being filled up in that year in accordance with any provision for reservations made under Article 16 of the Constitution, shall be considered as a separate class of vacancies to be filled up in any succeeding year or years, and such class of vacancies shall not be considered together with the vacancies of the year in which they were filled up for determining the ceiling of fifty per cent reservation against total number of vacancies of that year.

82. The Constitution (Eighty-second Amendment) Act, 2000—The amendment provides that nothing in Article 335 shall prevent the State from making any provision in favour of the members of the Scheduled Castes and the Scheduled Tribes for relaxation in qualifying marks in any examination or lowering the standards of evaluation for reservation in matters of promotion to any class or classes of services or posts in connection with affairs of the Union or of a State.

83. The Constitution (Eighty-third Amendment) Act, 2000—The Act amended Acticle 243M of the Constitution to provide that no reservation in Panchayats need be made in favour of the Scheduled Castes in Arunachal Pradesh wholly inhabited by tribal population.

84. The Constitution (Eighty-fourth Amendment) Act, 2001—The Act amended provisos to articles 82 and 170(3) of the Constitution to readjust and rationalise the territorial constitutencies in the States, without altering the number of seats allotted to each State in House of People and Legislative Assemblies of the States, including the Scheduled Castes and Scheduled Tribes constituencies, on the basis of the population ascertained at the census for the year 1991 so as to remove the imbalance caused due to uneven growth of population / electorate in different constituencies. It is also to refix the number of seats reserved for the Scheduled Castes and the Scheduled Tribes in the House of the People and the Legislative Assemblies of the States on the basis of the population ascertained at the census for the year 1991 so as to remove the imbalance caused due to uneven growth of population / electorate in different constituencies. It is also to refix the number of seats reserved for Scheduled Castes and the Scheduled Tribes in the House of the People and the Legislative Assemblies of the States on the basis of the

population ascertained at the census for the year 1991.

85. The Constitution (Eighty-fifth Amendment) Act, 2001—This Act amended article 16(4A) of the Constitution to provide for consequential seniority in the case of promotion by virtue of rule of reservation for the Government servants belonging to the Scheduled Castes and the Scheduled Tribes. It also provides retrospective effect from 17th day of June 1995.

86. The Constitution (Eighty-sixth Amendment) Act, 2002—The Act deals with insertion of a new article 21A after article 21. The new article 21A deals with Right to Education—"The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine".

Substitution of new Article for Article 45. For Article 45 of the Constitution, the following article shall be substituted, namely, Provision for early childhood care and education to children below the age of six years. Article 45: "The State shall endeavour to provide early childhood care and education for all children until they complete the age of six years."

Article 51A of the Constitution was amended and a new clause (k) was added after clause (j), namely, "(k) who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years."

87. The Constitution (Eighty-seventh Amendment) Act, 2003 - In Article 81 of the Constitution, in clause (3), in the proviso, in clause (ii), for the figures "1991'', the figures "2001'' shall be substituted.

In Article 82 of the Constitution, in the third proviso, in clause (ii), for the figures "1991", the figures "2001'' shall be substituted.

In Article 170 of the Constitution, - (i) in clause (2), in the Explanation, in the proviso, for the figures "1991", the figures "2001'' shall be substituted; (ii) in clause (3), in the Explanation, in the third proviso, for the figures "1991", the figures "2001'' shall be substituted.

In Article 330 of the constitution, in the Explanation, in the proviso, for the figures "1991", the figures "2001" shall be substituted.

88. The Constitution (Eighty-eighth Amendment) Act, 2003 - It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

After Article 268 of the Constitution, the following article shall be inserted, namely :

"268A. (1) Taxes on services shall be levied by the Government of India and such tax shall be collected and appropriated by the Government of India and the States in the manner provided in clause (2).

(2) The proceeds in any financial year of any such tax levied in accordance with the provisions of clause (1) shall be - (a) collected by the Government of India and the States; (b) appropriated by the Government of India and the States, in accordance with such principles of collection and appropriation as may be formulated by Parliament by law".

In Article 270 of the constitution, in clause(1), for the words and figures "Article 268 and 269", the words, figures and letter "Articles 268, 268A and 269" shall be substituted.

In the Seventh Schedule to the Constitution, in **List I-Union List,** after entry 9.2B, the following entry shall be inserted, namely : "92C. Taxes on services".

89 The Constitution (Eighty-ninth Amendment) Act, 2003-It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

In Article 338 of the Constitution, - (a) for the marginal heading, the following marginal heading shall be substituted, namely :

"National Commission for : Scheduled Castes'';

(b) for clauses (1) and (2), the following clauses shall be substituted, namely:

"(1) There shall be a Commission for the Scheduled Castes to be known as the National Commission for the Scheduled Castes.

(2) Subject to the provisions of any law made in this behalf by Parliament, the Commission shall consist of a Chairperson, Vice-Chairperson and three other Members and the conditions of service and tenure of office of the Chairperson, Vice-Chairperson and other Members so appointed shall be such as the President may by rule determine";

(c) in clauses (5), (9) and (10), the words "and Scheduled Tribes", wherever they occur, shall be omitted.

After Article 338 of the Constitution, the following article shall be inserted, namely:

"338A. (1) There shall be a Commission for the Scheduled Tribes to be known as the National Commission for the Scheduled Tribes.

(2) Subject to the provisions of any law made in this behalf by Parliament, the Commission shall consist of a Chairperson, Vice-Chairperson and three other Members and the conditions of service and tenure of office of the Chairperson, Vice-Chairperson and other Members so appointed shall be such as the President may by rule determine.

(3) The Chairperson, Vice-Chairperson and other Members of the Commission shall be appointed by the President by warrant under his hand and seal.

(4) The Commission shall have the power to regulate its own procedure.

(5) It shall be the duty of the Commission - (a) to investigate and monitor all matters relating to the safeguards provided for the Scheduled Tribes under this Constitution or under any other law for the time being in force or under any order of the Government and to evaluate the working of such safeguards; (b) to inquire into specific complaints with respect to the deprivation of rights and safeguards of the Scheduled Tribes; (c) to participate and advise on the planning process of socio-economic development of the Scheduled Tribes and to evaluate the progress of their development under the Union and any State; (d) to present to the President, annually and at such other times as the Commission may deem fit, reports upon the working of those safeguards; (e) to make in such reports recommendations as to the measures that should be taken by the Union or any State for the effective implementation of those safeguards and other measures for the protection, welfare and socio-economic development of the Scheduled Tribes; and (f) to discharge such other functions in relation to the protection, welfare and development and advancement of the Scheduled Tribes as the President may, subject to the provisions of any law made by Parliament, by rule specify.

(6) The President shall cause all such reports to be laid before each House of Parliament along with a memorandum explaining the action taken or proposed to be taken on the recommendations relating to the Union and the reasons for the non-acceptance, if any, of any of such recommendations.

(7) Where any such report, or any part thereof, relates to any matter with which any State Government is concerned, a copy of such report shall be forwarded to the Governor of the State who shall cause it to be laid before the Legislature of the State along with a memorandum explaining the action taken or proposed to be taken on the recommendations relating to the State and reasons for the non-acceptance, if any, of any of such recommendations.

(8) The Commission shall, while investigating any matter referred to in sub-clause(a) or inquiring into any complaint referred to in sub-clause (b) of clause (5), have all the powers of a civil court trying a suit and in particular in respect of the following matters, namely:

(a) summoning and enforcing the attendance of any person from any part of India and examining him on oath; (b) requiring the discovery and production of any document; (c) receiving evidence on affidavits; (d) requisitioning any public record or copy thereof from any court or office; (e) issuing commissions for the examination of witnesses and documents; (f) any other matter which the President may, by rule, determine.

(9) The Union and every State Government shall consult the Commission on all major policy matters affecting Scheduled Tribes".

90. The Constitution (Ninetieth Amendment) Act, 2003-In Article 332 of the Consitution, in clause (6), the following proviso shall be inserted, namely :

"Provided that for elections to the Legislative Assembly of the State of Assam, the representation of the Scheduled Tribes and non-Scheduled Tribes in the constituencies included in the Bodoland Territorial Areas District, so notified, and existing prior to the constitution of the Bodoland Territorial Areas District, shall be maintained".

91. The Constitution (Ninety-first Amendment), Act, 2003 - In Article 75 of the Constitution, after clause (1), the following clauses shall be inserted, namely :

"(1A) The total number of Ministers, including the Prime Minister, in the Council of Ministers shall not exceed fifteen per cent of the total number of members of the House of the People.

(1B) A member of either House of Parliament belonging to any political party who is disqualified

for being a member of that House under paragraph 2 of the Tenth Schedule shall also be disqualified to be appointed as a Minister under clause (1) for duration of the period commencing from the date of his disqualification till the date on which the term of his office as such member would expire or where he contests any election to either House of Parliament before the expiry of such period, till the date on which he is declared elected, whichever is earlier"

In Article 164 of the Constitution, after clause (i), the following clauses shall be inserted, namely:

"(1A) the total number of Ministers, including the Chief Minister, in the Council of Ministers in a State sall not exceed fifteen per cent of the total number of members of the Legislative Assembly of that State :

Provided that the number of Ministers, including the Chief Minister, in a State shall not be less than twelve:

Provided further that where the total number of Ministers, including the Chief Minister, in the Council of Ministers in any State at the commencement of the Constitution (Ninety-first Amendment) Act, 2003 exceeds the said fifteen per cent or the number specified in the first proviso, as the case may be, then, the total number of Ministers in that State shall be brought in conformity with the provisions of this clause within six months from such date as the President may by public notification appoint.

(1B) A member of the Legislative Assembly of a State or either House of the Legislature of a State having Legislative Council beloging to any poitical party who is disqualified for being a member of that House under paragraph 2 of the Tenth Schedule shall also be disqualified to be appointed as a Minister under clause (1) for duration of the period commencing from the date of his disqualification till the date on which the term of his office as such member would expire or where he contests any election to the Legislative Assembly of a State or either House of the Legislature of a State having Legislative Council, as the case may be, before the expiry of such period, till the date on which he is declared elected, whichever is earlier"

After Article 361A of the Constitution, the following article shall be inserted, namely :

316B. A member of a House belonging to any political party who is disqualified for being a member of the House under paragraph 2 of the Tenth Schedule shall also be disqualified to hold any remunerative political post for duration of the period commencing from the date of his disqualification till the date on which the term of his office as such member would expire or till the date on which he contests an election to a House and is declared elected, whichever is earlier.

Explanation : For the purposes of this Article,—

(a) the expression "House" has the meaning assigned to it in clause (a) of paragraph 1 of the Tenth Schedule :

(b) the expression "remunerative political post" means any office—(i) under the Government of India or the Government of a State where the salary or remuneration for such office is paid out of the public revenue of the Government of India or the Government of the State, as the case may be, or (ii) under a body, whether incorporated or not, which is wholly or partially owned by the Government of India or the Government of a State and the salary or remuneration for such office is paid by such body, except where such salary or remuneration paid is compensatory in nature'.

In the Tenth Schedule to the Constitution,—(a) in paragraph, 1, in clause (b), the words and figure "paragraph 3 or, as the case may be," shall be omitted; (b) in paragraph 2, in sub-paragraph (1), for the words and figures "paragraphs 3, 4 and 5", the words and figures "paragraphs 4 and 5" shall be substituted; (c) paragraph 3 shall be omitted.

92. The Constitution (Ninety-second Amendment) Act, 2003—In the Eighth Schedule to the Constitution,—(a) existing entry 3 shall be re-numbered as entry 5, and before entry 5 as so re-numbered, the following entries shall be inserted, namely:

"3. Bodo;

4. Dogri".

(b) existing 4 to 7 shall respectively be re-numbered as entries 6 to 9; (c) existing entry 8 shall be re-numbered as entry 11 and before entry 11 as so renumbered, the following entry shall be inserted, namely:

"10. Maithili".

(d) existing entries 9 to 14 shall respectively be re-numbered as entries 12 to 17;

(e) existing entry 15 shall be re-numbered as entry 19 and before entry 19 as so re-numbered, the following entry shall be inserted, namely :

"18. Santhali".

(f) existing entries 16 to 18 shall respectively be re-numbered as entries 20 to 22.

93. The Constitution (Ninety-third amendment) Act, 2006 - Greater access to higher education including professional education, is of great importance to a large number of students belonging to the Scheduled Castes, the Scheduled Tribes and other socially and educationally backward classes of citizens. The reservation of seats for the Scheduled Castes, the Scheduled Tribes and the Other Backward Classes of citizens in admission to educational institution is derived from the provisions of clause (4) of articles 15 of the constitution. At present, the number of seats available in aided or State maintained institutions, particularly in respect of professional education, is limited, in comparison to those in private unaided institutions.

Clause (i) of article 30 of the Constitution provides the right to all minorities to establish and administer educational institutions of their choice. It is essential that the rights available to minorities are protected in regard to institutions established and administered by them. Accordingly, institutions declared by the State to be minority institutions under clause (1) of article 30 are excluded from the operation of this enactment.

To promote the educational advancement of the socially and educationally backward classes of citizens, i.e., the Other Backward Classes or of the Scheduled Castes and the Scheduled Tribes in matters of admission of students belonging to these categories in unaided educational institutions, other than the minority educational institutions referred to in clause (1) of article 30, the provisions of article 15 were amplified. The new clause (5) of said article 15 shall enable the Parliament as well as the State Legislatures to make appropriate laws for the above mentioned purpose.

Appendices

GOVERNMENT OF INDIA

Smt. Pratibha Patil — President

Mohammed Hamid Ansari — Vice-President

CABINET MINISTERS

(As on 25 October 2007)

Dr. Manmohan Singh	Prime Minister and also in-charge of the Ministries/ Departments not specifically allocated to the charge of any Minister, viz., Ministry of Personnel, Public Grievances & Pensions; Ministry of Planning; Department of Atomic Energy; and Department of Space.
Shri Pranab Mukherjee	Minister of External Affaris
Shri Arjun Singh	Minister of Human Resource Development
Shri A.K. Antony	Minister of Defence
Shri Sharad Pawar	Minister of Agriculture; Minister of Consumer Affairs, Food and Public Distribution
Shri Lalu Prasad	Minister of Railways
Shri Shivraj V. Patil	Minister of Home Affairs
Shri A.R. Antulay	Minister of Minority Affairs
Shri Sushilkumar Shinde	Minister of Power
Shri Ram Vilas Paswan	Minister of Chemicals and Fertilizers; Minister of Steel
Shri S. Jaipal Reddy	Minister of Urban Development
Shri Sis Ram Ola	Minister of Mines
Shri P. Chidambaram	Minister of Finance
Shri Mahavir Prasad	Minister of Small-Scale Industries; Minister of Agro & Rural Industries
Shri P.R. Kyndiah	Minister of Tribal Affairs
Shri T.R. Balu	Minister of Shipping; Road Transport & Highways
Shri Shankersinh Vaghela	Minister of Textiles
Shri Vayalar Ravi	Minister of Overseas Indian Affairs
Shri Kamal Nath	Minister of Commerce & Industry
Shri H.R. Bhardwaj	Minister of Law & Justice
Shri Sontosh Mohan Dev	Minister of Heavy Industries & Public Enterprises
Shri Saif-ud-din Soz	Minister of Water Resources
Shri Raghuvansh Prasad Singh	Minister of Rural Development
Shri Priya Ranjan Das Munsi	Minister of Parliamentary Affairs; Minister of Information & Broadcasting

Shri Mani Shankar Aiyar	Minister of Youth Affairs & Sports; Minister of Panchayti Raj; Minister of Development of North-Eastern Region
Smt Meira Kumar	Minister of Social Justice and Empowerment
Shri Murli Deora	Minister of Petroleum and Natural Gas
Smt Ambika Soni	Minister of Tourism and Culture
Shri Shibu Soren	Minister of Coal
Shri A. Raja	Minister of Environment and Forests
Shri Dayanidhi Maran	Minister of Communications and Information Technology
Shri Anbumani Ramadoss	Minister of Health and Family Welfare
Shri Kapil Sibal	Minister of Science and Technology; Minister of Earth Sciences
Shri Prem Chand Gupta	Minister of Company Affairs

MINISTERS OF STATE (Independent Charge)

Shri Oscar Fernandes	Minister of Labour and Employment
Shri Subodh Kant Sahay	Minister of Food Processing Industries
Shri Praful Patel	Minister of Civil Aviation
Smt Renuka Chowdhury	Minister of Women and Child Development
Shri G.K. Vasan	Minister of Statistics and Programme Implementation
Kumari Selja	Minister of Housing and Urban Poverty Alleviation
Shri Vilas Muttemwar	Minister of New and Renewable Energy

MINISTERS OF STATE (MoS)

Shri E. Ahamed	MoS in Ministry of External Affairs
Shri Suresh Pachouri	MoS in Ministry of Personnel, Public Grievance and Pensions; MoS in Ministry of Parliamentary Affairs
Shri B.K. Handique	MoS in Ministry of Chemicals and Fertilizers; MoS in Ministry of Parliamentary Affairs
Smt Panabaka Lakshmi	MoS in Ministry of Health and Family Welfare
Dr. Dasari Narayana Rao	MoS in Ministry of Coal
Dr. Shakeel Ahmad	MoS in Ministry of Communications and Information Technology
Shri Rao Inderjit Singh	MoS in Ministry of Defence
Shri Naranbhai Rathwa	MoS in Ministry of Railways
Shri K.H. Muniappa	MoS in Ministry of Shipping, Road Transport & Highways
Shri M.V. Rajasekharan	MoS in Ministry of Planning
Shri Knatilal Bhuria	MoS in Ministry of Agriculture; MoS in Ministry of Consumer Affairs, Food and Public Distribution
Shri Manikrao Gavit	MoS in Ministry of Home Affairs

Shri Prakash Jaiswal	MoS in Ministry of Home Affairs
Shri Prithviraj Chavan	MoS in Ministry Prime Minister's Office
Shri Taslimuddin	MoS in Ministry of Agriculture; MoS in Ministry of Consumer Affairs, Food and Public Distribution
Smt Suryakanta Patil	MoS in Ministry of Rural Development; MoS in Ministry of Parliamentary Affairs
Shri Md Ali Ashraf Fatmi	MoS in Ministry of Human Resource Development
Shri R. Velu	MoS in Ministry of Railways
Shri S.S. Palanimanickam	MoS in Ministry of Finance
Shri S. Regupathy	MoS in Ministry of Home Affairs
Shri K. Venkatapathy	MoS in Ministry Law and Justice
Smt Subbulakshmi Jagadeesan	MoS in Ministry of Social Justice and Empowerment
Shri E.V.K.S. Elangovan	MoS in Ministry of Textiels
Shri Kanti Singh	MoS in Department of Heavy Industries (Ministry of Heavy Industries and Public Enterprises)
Shri Namo Narain Meena	MoS in Ministry of Environment and Forests
Shri Akislesh Prasad Singh	MoS in Ministry of Agriculture; MoS in Ministry of Consumer Affairs, Food and Public Distribution
Shri Pawan Kumar Bansal	MoS in Ministry of Finance
Shri Anand Sharma	MoS in Ministry of External Affairs
Shri Ajay Maken	MoS in Ministry of Urban Development
Smt Dinsha J. Patel	MoS in Ministry of Petroleum and Natural Gas
Shri M.M. Pallam Raju	MoS in Ministry of Defence
Shri T. Subbarami Reddy	MoS in Ministry of Mines
Shri Akhilesh Das	MoS in Ministry of Steel
Shri Ashwani Kumar	MoS in Department of Industrial Policy and Promotion; MoS in Ministry of Commerce and Industry
Shri Jairam Ramesh	MoS in Department of Commerce (Ministry of Commerce and Industry)
Shri Chandra Sekhar Sahu	MoS in Ministry of Rural Development
Smt D. Purandeswari	MoS in Ministry of Human Resource Development
Shri M.H. Ambareesh	MoS in Ministry of Information and Broadcasting
Shri Jai Prakash Narayan Yadav	MoS in Ministry of Water Resources

MEMBERS OF PARLIAMENT

RAJYA SABHA

(As on 23 June 2007)

Chairman Shri Mohmmed Hamid Ansari

Deputy Chairman Shri K. Rahman Khan

	Name	Party/Group
	STATES	
	ANDHRA PRADESH (18)	
1.	Sudarshan Akarapu	TDP
2.	Raashid Alvi	INC
3.	S.M. Laljan Basha	TDP
4.	Smt. N.P. Durga	TDP
5.	Penumalli Madhu	CPI(M)
6.	Nandi Yellaiah	INC
7.	Syed Azeez Pasha	CPI
8.	C. Ramachandraiah	TDP
9.	Jairam Ramesh	INC
10.	Dr. Dasari Narayana Rao	INC
11.	K. Keshava Rao	INC
12.	V.Hanumantha Rao	INC
13.	G. Sanjeeva Reddy	INC
14.	M.V.Mysura Reddy	TDP
15.	Ravula Chandra Sekhar Reddy	TDP
16.	Dr. T. Subbarami Reddy	INC
17.	Gireesh Kumar Sanghi	INC
18.	Jesudasu Seelam	INC
	ARUNACHAL PRADESH –1	
19.	Nabam Rebia	INC
	ASSAM – 7	
20.	Karnendu Bhattacharjee	INC
21.	Indramoni Bora	BJP
22.	Urkhao Gwra Brahma	IND
23.	Silvius Condpan	INC

24.	Dwijendra Nath Sharmah	INC
25.	Dr. Manmohan Singh	INC
26.	Smt. Syeda Anwara Taimur	INC

BIHAR – 16

27.	Ali Anwar	JD(U)
28.	Prof. Ram Deo Bhandary	RJD
29.	R.K. Dhawan	INC
30.	Prem Chand Gupta	RJD
31.	Jabir Husain	RJD
32.	Dr. Mahendra Prasad	JD(U)
33.	Mangani Lal Mandal	RJD
34.	Jai Narain Prasad Nishad	BJP
35.	Rajniti Prasad	RJD
36.	Ravi Shankar Prasad	BJP
37.	Motiur Rahman	RJD
38.	Mahendra Sahni	JD (U)
39.	Bashistha Narain Singh	SAMATA
40.	Shatrughan Sinha	BJP
41.	Sharad Yadav	JD(U)
42.	Subhash Prasad Yadav	RJD

CHHATTISGARH – 5

43.	Dilip Singh Judev	BJP
44.	Ramadhar Kashyap	INC
45.	Smt. Mohsina Kidwai	INC
46.	Motilal Vora	INC
47.	Shreegopal Vyas	BJP

GOA – 1

48.	Shantaram Laxman Naik	INC

GUJARAT – 11

49.	Suryakantbhai Acharya	BJP
50.	Jayantilal Barot	BJP
51.	Arun Jaitley	BJP
52.	Jana Krishnamurthy K.	BJP
53.	Prof. Alka Balram Kshatriya	INC

54.	Ahmed Patel	INC
55.	Kanjibhai Patel	BJP
56.	Keshubhai S. Patel	BJP
57.	Surendra Motilal Patel	BJP
58.	Praveen Rashtrapal	INC
59.	Vijaykumar Rupani	BJP

HARYANA – 5

60.	Hans Raj Bhardwaj	INC
61.	Ajay Singh Chautala	INLD
62.	Smt. Sumitra Mahajan	INLD
63.	Harendra Singh Malik	INLD
64.	Tarlochan Singh	IND.

HIMACHAL PRADESH – 3

65.	Anand Sharma	INC
66.	Suresh Bhardwaj	BJP
67.	Smt. Viplove Thakur	INC

JAMMU & KASHMIR – 4

68.	Dr. Farooq Abdullah	J & K NC
69.	Chowdhary Mohammad Aslam	INC
70.	T.S.Bajwa	PDP
71.	Prof. Saif-ud-Din Soz	INC

JHARKHAND – 6

72.	S.S. Ahluwalia	BJP
73.	Devdas Apte	BJP
74.	Ajay Maroo	BJP
75.	Ms. Mabel Rebello	INC
76.	Digvijay Singh	JD(U)
77.	Yashwant Sinha	BJP

KARNATAKA – 12

78.	Smt. Prema Cariappa	INC
79.	Rajeev Chandrasekhar	IND
80.	Oscar Fernandes	INC
81.	B.K. Hariprasad	INC

82.	K. Rahman Khan	INC
83.	Dr. Vijay Mallya	IND
84.	M. Rajasekara Murthy	JD(S)
85.	M. Venkaiah Naidu	BJP
86.	Janardhana Poojary	INC
87.	M.V. Rajasekharan	INC
88.	Dr. M.A.M. Ramaswamy	JD(S)
89.	K.B. Shanappa	BJP

KERALA – 9

90.	Abdul Wahab Peevee	ML
91.	A.K. Antony	INC
92.	K.E. Ismail	INC
93.	K. Chandran Pillai	CPI(M)
94.	Thennala G. Balakrishna Pillai	INC
95.	Vayalar Ravi	INC
96.	M.P. Abdussamad Samadani	ML
97.	A. Vijayaraghavan	CPI(M)
98.	Prof P. J. Kurian	INC

MADHYA PRADESH – 11

99.	Maulana Obaidullah Khan Azmi	INC
100.	Narayan Singh Kesari	BJP
101.	Pyarelal Khandelwal	BJP
102.	Suresh Pachouri	INC
103.	Laxminarayan Sharma	BJP
104.	Arjun Singh	INC
105.	Smt. Maya Singh	BJP
106.	Smt. Sushma Swaraj	BJP
107.	Su. Thirunavukkarasar	BJP
108.	Ms. Anusuiya Uikey	BJP
109.	Vikram Verma	BJP

MAHARASHTRA – 19

110.	Dr. P. C. Alexander	IND
111.	Balavant alias Bal Apte	BJP
112.	Rahul Bajaj	IND.

113.	Prithviraj Chavan	INC
114.	Vasant Chavan	NCP
115.	Vijay J. Darda	INC
116.	Murli Deora	INC
117.	Rajkumar Dhoot	SS
118.	Vedprakash P. Goyal	BJP
119.	Manohar Joshi	SS
120.	Sharad Anantrao Joshi	Swatantra Bharat Paksh
121.	Datta Meghe	NCP
122.	Praful Patel	NCP
123.	Shivraj Vishwanath Patil	INC
124.	Sanjay Raut	SS
125.	Sushilkumar Sambhajirao Shinde	INC
126.	Rajeev Shukla	INC
127.	Tariq Anwar	NCP
128.	Ekanath K. Thakur	SS

MANIPUR – 1

129.	Rishang Keishing	INC

MEGHALAYA – 1

130.	Robert Kharshiing	NCP

MIZORAM – 1

131.	Lalhming Liana	MNF

NAGALAND – 1

132.	T.R. Zeliang	NPF

ORISSA – 10

133.	Ms. Pramila Bohidar	BJD
134.	Surendra Lath	BJP
135.	Bhagirathi Majhi	BJP
136.	Pyarimohan Mohapatra	BJD
137.	Dr. Radhakant Nayak	INC
138.	B. J. Panda	BJD
139.	Rudra Narayan Pany	BJP
140.	Dilip Ray	IND

141.	Smt. Sushree Devi	BJD
142.	Ms. Sushila Tiriya	INC

PUNJAB – 7

143.	Ashwani Kumar	INC
144.	Varinder Singh Bajwa	SAD
145.	Dr. M.S. Gill	INC
146.	Raj Mohinder Singh Majitha	SAD
147.	Dharam Pal Sabharwal	INC
148.	Smt. Ambika Soni	INC
149.	Naresh Gujral	SAD

RAJASTHAN – 10

150.	Ramdas Agarwal	BJP
151.	Santosh Bagrodia	INC
152.	Krishan Lal Balmiki	BJP
153.	Lalit Kishore Chaturvedi	BJP
154.	Dr. (Smt.) Najma A. Heptulla	BJP
155.	K. Natwar Singh	INC
156.	Dr. Gyan Prakash Pilania	BJP
157.	Jaswant Singh	BJP
158.	Dr. Abhishek Manu Singhvi	INC
159.	Dr. Prabha Thakur	INC

SIKKIM – 1

160.	O.T.Lepcha	SDF

TAMIL NADU – 18

161.	S. Anbalagan	AIADMK
162.	S. S. Chandran	AIADMK
163.	T.T.V. Dhinakaran	AIADMK
164.	B. S. Gnanadesikan	INC
165.	N.R. Govindarajar	AIADMK
166.	Smt. S. G. Indira	AIADMK
167.	N. Jothi	AIADMK
168.	R. Kamaraj	AIADMK
169.	S.P.M. Syed Khan	AIADMK
170.	Dr. K. Malaisamy	AIADMK

171.	P. G. Narayanan	AIADMK
172.	E.M. Sudarsana Natchiappan	INC
173.	C. Perumal	AIADMK
174.	Dr. Anbumani Ramadoss	PMK
175.	Thanga Tamil Selvan	AIADMK
176.	R. Shunmugasundaram	DMK
177.	G.K. Vasan	INC
178.	A Elavarasan	AIADMK

TRIPURA – 1

179.	Matilal Sarkar	CPI(M)

UTTAR PRADESH – 31

180.	Dr. Akhilesh Das	INC
181.	Kamal Akhtar	SP
182.	Munquad Ali	BSP
183.	Gandhi Azad	BSP
184.	Abu Asim Azmi	SP
185.	Smt. Jaya Bachchan	SP
186.	Balihari Babu	BSP
187.	Virendra Bhatia	SP
188.	Dr. Murli Manohar Joshi	BJP
189.	Banwari Lal Kanchal	SP
190.	Vinay Katiyar	BJP
191.	Amir Alam Khan	SP
192.	Mahmood A. Madani	RLD
193.	Mahendra Mohan	SP
194.	Veer Pal Singh Yadava	SP
195.	Janeshwar Mishra	SP
196.	Kalraj Mishra	BJP
197.	Satish Chandra Misra	BSP
198.	Mukhtar Abbas Naqvi	BJP
199.	Ram Narayan Sahu	SP
200.	Arun Shourie	BJP
201.	Shahid Siddiqui	SP
202.	Amar Singh	SP
203.	Bhagwati Singh	SP
204.	Isam Singh	BSP

205.	Raj Nath Singh	BJP
206.	Uday Pratap Singh	SP
207.	Veer Singh	BSP
208.	Lalit Suri	IND.
209.	Nand Kishore Yadav	SP
210.	Vacant	

UTTARAKHAND – 3

211.	Satyavrat Chaturvedi	INC
212.	Harish Rawat	INC
213.	Satish Kumar Sharma	INC

WEST BENGAL – 16

214.	Sk. Khabir Uddin Ahmed	CPI(M)
215.	Debabrata Biswas	AIFB
216.	Swapan Sadhan Bose	AITC
217.	Prasanta Chatterjee	CPI(M)
218.	Moinul Hassan	CPI(M)
219.	Smt. Brinda Karat	CPI(M)
220.	Mohammed Amin	CPI(M)
221.	Dr. Barun Mukherjee	AIFB
222.	Saman Pathak	CPI(M)
223.	Abani Roy	RSP
224.	Mukul Roy	AITC
225.	Tarini Kanta Roy	CPI(M)
226.	Tapan Kumar Sen	CPI(M)
227.	Arjun Kumar Sengupta	IND.
228.	Dinesh Trivedi	AITC
229.	Sitaram Yechury	CPI(M)

UNION TERRITORIES

NATIONAL CAPITAL TERRITORY OF DELHI - 3

230.	Jai Parkash Aggarwal	INC
231.	Janardan Dwivedi	INC
232.	Dr. Karan Singh	INC

PONDICHERRY – 1

233.	V. Narayanasamy	INC

NOMINATED – 12

234.	Shyam Benegal	NOM
235.	Smt. Shobhana Bhartia	NOM
236.	Kumari Nirmala Deshpande	NOM
237.	Smt. Hema Malini*	NOM
238.	Dr. Bimal Jalan	NOM
239.	Ram Jethmalani	NOM
240.	Dr. K. Kasturirangan	NOM
241.	Dr. Narayan Singh Manaklao*	NOM
242.	Dr. Chandan Mitra	NOM
243.	Dara Singh*	NOM
244.	Prof M.S. Swaminathan	NOM
245.	Dr. (SMT) Kapilavatsyayan	NOM

LOK SABHA

(As on 31 May 2007)

Speaker : Somnath Chatterjee

State/Constituency		Name of the Member	Party/Group
ANDHRA PRADESH (42)			
1	Srikakulam	Kinjarapu Yerrannaidu	TDP
2	Parvathipuram (ST)	Vyricherla Kishore Chandra S. Deo	INC
3	Bobbili	Jhansi Laxmi Batcha	INC
4	Visakhapatnam	Janardhana Reddy Nedurumalli	INC
5	Bhadrachalam (ST)	Midiyam Babu Rao	CPI(M)
6	Anakapalli	Chalapathirao Pappala	TDP
7	Kakinada	Mallipudi Mangapati Pallam Raju	INC
8	Rajahmundry	Aruna Kumar Vundavalli	INC
9	Amalapuram (SC)	G.V. Harsha Kumar	INC
10	Narasapur	Chegondi Venkata Harirama Jogaiah	INC
11	Eluru	Kavuru Samba Siva Rao	INC
12	Machilipatnam	Badiga Ramakrishna	INC
13	Vijayawada	Rajagopal Lagadapati	INC
14	Tenali	Balashowry Vallabhaneni	INC
15	Guntur	Rayapati Sambasiva Rao	INC
16	Bapatla	Daggubati Purandareswari	INC
17	Narasaraopet	Mekapati Rajamohan Reddy	INC
18	Ongole	Magunta Sreenivasulu Reddy	INC

* Belongs to the BJP

19	Nellore (SC)	Panabaka Lakshmi	INC
20	Tirupathi (SC)	Chinta Mohan	INC
21	Chittoor	D.K. Audikesavulu	TDP
22	Rajampet	Annayyagari Sai Prathap	INC
23	Cuddapah	Y.S. Vivekananda Reddy	INC
24	Hindupur	Nizamoddin	INC
25	Anantapur	Anantha Venkata Rami Reddy	INC
26	Kurnool	Kotla Jayasurya Prakasha Reddy	INC
27	Nandyal	S.P.Y. Reddy	INC
28	Nagarkurnool (SC)	Dr. Manda Jagannath	TDP
29	Mahabubnagar	D. Vittal Rao	INC
30	Hyderabad	Asaduddin Owaisi	AIMEIM
31	Secunderabad	M. Anjan Kumar Yadav	INC
32	Siddipet (SC)	Sarvey Sathyanarayana	INC
33	Medak	A. Narendra	TRS
34	Nizamabad	Madhu Goud Yaskhi	INC
35	Adilabad	Takkala Madhusudhan Reddy	TRS
36	Peddapalli (SC)	G. Venkat Swamy	INC
37	Karimnagar	K. Chandra Shakher Rao	TRS
38	Hanamkonda	B. Vinod Kumar	TRS
39	Warangal	Dharavath Ravinder Naik	TRS
40	Khammam	Renuka Chowdhury	INC
41	Nalgonda	Suravaram Sudhakar Reddy	CPI
42	Miryalguda	Sudini Jaipal Reddy	INC

ARUNACHAL PRADESH (2)

43	Arunachal West	Khiren Rijiju	BJP
44	Arunachal East	Tapir Gao	BJP

ASSAM (14)

45	Karimganj (SC)	Lalit Mohan Suklabaidya	INC
46	Silchar	Sontosh Mohan Dev	INC
47	Autonomous District (ST)	Biren Singh Engti	INC
48	Dhubri	Anwar Hussain	INC
49	Kokrajhar (ST)	Sansuma Khunggur Bwiswmuthiary	IND
50	Barpeta	A.F. Golam Osmani	INC
51	Guwahati	Kirip Chaliha	INC
52	Mangaldoi	Narayan Chandra Borkataky	BJP
53	Tezpur	Moni Kumar Subba	INC
54	Nowgong	Rajen Gohain	BJP
55	Kaliabor	Dip Gogoi	INC
56	Jorhat	Bijoy Krishna Handique	INC
57	Dibrugarh	Sarbananda Sonowal	AGP
58	Lakhimpur	Dr. Arun Kumar Sarmah	AGP

BIHAR (40)

59	Bagaha (SC)	Kailash Baitha	JD(U)
60	Bettiah	Raghunath Jha	RJD
61	Motihari	Akhilesh Prasad Singh	RJD
62	Gopalganj	Anirudh Prasad alias Sadhu Yadav	RJD
63	Siwan	Dr. Md Shahabuddin	RJD
64	Maharajganj	Prabhunath Singh	JD(U)
65	Chapra	Lalu Prasad	RJD
66	Hajipur (SC)	Ram Vilas Paswan	LJSP
67	Vaishali	Raghubansh Prasad Singh	RJD
68	Muzaffarpur	George Fernandes	JD(U)
69	Sitamarhi	Sitaram Yadav	RJD
70	Sheohar	Sitaram Singh	RJD
71	Madhubani	Dr. Shakeel Ahmad	INC
72	Jhanjharpur	Devendra Prasad Yadav	RJD
73	Darbhanga	Md. Ali Ashraf Fatmi	RJD
74	Rosera (SC)	Ram Chandra Paswan	LJSP
75	Samastipur	Alok Kumar Mehta	RJD
76	Barh	Vijay Krishna	RJD
77	Balia	Suraj Singh	LJSP
78	Saharsa	Ranjeet Ranjan	LJSP
79	Madhepura	Rajesh Ranjan Alias Pappu Yadav	RJD
80	Araria (SC)	Sukdeo Paswan	BJP
81	Kishanganj	Taslimuddin	RJD
82	Purnea	Uday Singh	BJP
83	Katihar	Nikhil Kumar Choudhary	BJP
84	Banka	Giridhari Yadav	RJD
85	Bhagalpur	Syed Shahnawaz Hussain	BJP
86	Khagaria	Rabindra Kumar Rana	RJD
87	Monghyr	Jay Prakash Narayan Yadav	RJD
88	Begusarai	Rajiv Ranjan Singh	JD(U)
89	Nalanda	Ram Swaroop Prasad	JD(U)
90	Patna	Ram Kripal Yadav	RJD
91	Arrah	Kanti Singh	RJD
92	Buxar	Lalmuni Chaubey	BJD
93	Sasaram (SC)	Smt. Meira Kumar	INC
94	Bikramganj	Ajit Kumar Singh	JD(U)
95	Aurangabad	Nikhil Kumar	INC
96	Jahanabad	Ganesh Prasad Singh	RJD
97	Nawada (SC)	Virchandra Paswan	RJD
98	Gaya (SC)	Rajesh Kumar Manjhi	RJD

CHHATTISGARH (11)

99	Surguja (ST)	Nand Kumar Sai	BJP
100	Raigarh (ST)	Vishnudeo Sai	BJP
101	Janjgir	Karuna Shukla	BJP
102	Bilaspur (SC)	Punnulal Mohale	BJP
103	Sarangarh (SC)	Guharam Ajgalle	BJP
104	Raipur	Ramesh Bais	BJP
105	Mahasamund	Ajit Jogi	INC
106	Kanker (ST)	Sohan Potai	BJP
107	Bastar (ST)	Baliram Kashyap	BJP
108	Durg	Tarachand Sahu	BJP
109	Rajnandgaon	Dev Wrat Singh	INC

GOA (2)

110	Panaji	Shripad Yesso Naik	BJP
111	Mormugao	Vacant	

GUJARAT (26)

112	Kutch	Gadhavi Pushpadan Shambhudan	BJP
113	Surendranagar	Koli Patel Somabhai Gandabhai	BJP
114	Jamnagar	Ahir Vikrambhai Arjanbhai Madam	INC
115	Rajkot	Dr. Kathiria Vallabhbhai Ramjibhai	BJP
116	Porbandar	Patel Harilal Madhavjibhai (Haribhai Patel)	BJP
117	Junagadh	Barad Jasubhai Dhanabhai	INC
118	Amreli	Virjibhai Thummar	INC
119	Bhavnagar	Rana Rajendra Sinh Ghanashyamsinh (Rajubhai Rana)	BJP
120	Dhandhuka (SC)	Varma Ratilal Kalidas	BJP
121	Ahmedabad	Harin Pathak	BJP
122	Gandhinagar	L.K. Advani	BJP
123	Mehsana	Jivabhai Ambalal Patel	INC
124	Patan (SC)	Kanodia Maheshkumar Mithabhai	BJP
125	Banaskantha	Chavda Harisinhaji Pratapsinhaji	INC
126	Sabarkantha	Madhusudan Mistry	INC
127	Kapadvanj	Vaghela Shankersinh Laxmansinh	INC
128	Dohad (ST)	Katara Babubhai Khimabhai	BJP
129	Godhra	Solanki Bhupendrasinh Prabhatsinh	BJP
130	Kaira	Dinsha Patel	INC
131	Anand	Solanki Bharatsinh Madhavsinh	INC
132	Chhota Udaipur (ST)	Naranbhai Rathwa	INC
133	Baroda	Jayaben Thakkar	BJP
134	Broach	Vasava Mansukhbuai Dhanjibhai	BJP

135	Surat	Kashiram Rana	BJP
136	Mandvi (ST)	Chaudhary Tusharbhai Amarsinhbhai	INC
137	Bulsar (ST)	Kishanbhai Vestabhai Patel	INC

HARYANA (10)

138	Ambala (SC)	Selja	INC
139	Kurukshetra	Naveen Jindal	INC
140	Karnal	Arvind Kumar Sharma	INC
141	Sonepat	Kishan Singh Sangwan	BJP
142	Rohtak	Deepender Singh Hooda	INC
143	Faridabad	Avtar Singh Bhadana	INC
144	Mahendragarh	Inderjit Singh	INC
145	Bhiwani	Kuldeep Bishnoi	INC
146	Hissar	Jai Parkash	INC
147	Sirsa (SC)	Atma Singh Gill	INC

HIMACHAL PRADESH (4)

148	Shimla (SC)	Dhani Ram Shandil	INC
149	Mandi	Pratibha Singh	INC
150	Kangra	Chander Kumar	INC
151	Hamirpur	Vacant	

JAMMU & KASHMIR (6)

152	Baramulla	Abdul Rashid Shaheen	J&KNC
153	Srinagar	Omar Abdullah	J&KNC
154	Anantnag	Mehbooba Mufti	J&KPDP
155	Laddakh	Thupstan Chhewang	IND
156	Udhampur	Ch. Lal Singh	INC
157	Jammu	Madan Lal Sharma	INC

JHARKHAND (14)

158	Rajmahal (ST)	Hemlal Murmu	JMM
159	Dumka (ST)	Shibu Soren	JMM
160	Godda	Furkan Ansari	INC
161	Chatra	Dhirendra Agarwal	RJD
162	Kodarma	Babulal Marandi	IND
163	Giridih	Tek Lal Mahto	JMM
164	Dhanbad	Chandra Shekhar Dubey	INC
165	Ranchi	Subodh Kant Sahay	INC
166	Jamshedpur	Vacant	
167	Singhbhum (ST)	Bagun Sumbrai	INC
168	Khunti (ST)	Sushila Kerketta	INC

169	Lohardaga (ST)	Rameshwar Oraon	INC
170	Palamu (SC)	Gharan Ram	RJD
171	Hazaribagh	Bhubneshwar Prasad Mehta	CPI

KARNATAKA (28)

172	Bidar (SC)	Narsingrao H. Suryawanshi	INC
173	Gulbarga	Iqbal Ahmed Saradgi	INC
174	Raichur	A. Venkatesh Naik	INC
175	Koppal	K. Virupakshappa	INC
176	Bellary	G. Karunakara Reddy	BJP
177	Davangere	G.M. Siddeswara	BJP
178	Chitradurga	N.Y. Hanumanthappa	INC
179	Tumkur	S. Mallikarjunaiah	BJP
180	Chikballapur	R.L. Jalappa	INC
181	Kolar (SC)	K.H. Muniyappa	INC
182	Kanakapura	Dr. (Smt.) Tejaswani Seeramesh	INC
183	Bangalore North	Dr. H.T. Sangliana	BJP
184	Bangalore South	Ananth Kumar	BJP
185	Mandya	M.H. Ambareesh	INC
186	Chamarajanagar (SC)	M. Shivanna	JD(S)
187	Mysore	C.H. Vijayashankar	BJP
188	Mangalore	D.V. Sadananda Gowda	BJP
189	Udupi	Manorama Madhwaraj	BJP
190	Hassan	H.D. Devegowda	JD(S)
191	Chikmagalur	D.C. Srikantappa	BJP
192	Shimoga	S. Bangarappa	SP
193	Kanara	Ananthkumar Hegde	BJP
194	Dharwad South	Kunnur Manjunath Channappa	BJP
195	Dharwad North	Prahlad Joshi	BJP
196	Belgaum	Angadi Suresh Chanabasappa	BJP
197	Chikkodi (SC)	Jigajinagi Ramesh Chandappa	BJP
198	Bagalkot	Gaddigoudar P.C.	BJP
199	Bijapur	Basanagouda Patil (R. YATNAL)	BJP

KERALA (20)

200	Kasaragod	P. Karunakaran	CPI(M)
201	Cannanore	A.P. Abdullakutty	CPI(M)
202	Badagara	P. Satheedevi	CPI(M)
203	Calicut	M.P. Veerendra Kumar	JD(S)
204	Manjeri	T.K. Hamza	CPI(M)
205	Ponnani	E Ahamed	MLKSC
206	Palghat	N.N. Krishnadas	CPI(M)
207	Ottapalam (SC)	S. Ajaya Kumar	CPI(M)

208	Trichur	C.K. Chandrappan	CPI
209	Mukundapuram	Lonappan Nambadan	CPI(M)
210	Ernakulam	Dr. Sebastian Paul	IND
211	Muvattupuzha	P.C. Thomas (Pullolil)	KC
212	Kottayam	K. Suresh Kurup	CPI(M)
213	Idukki	K. Francis George	KC
214	Alleppey	Dr. K.S. Manoj	CPI(M)
215	Mavelikara	C.S. Sujatha	CPI(M)
216	Adoor (SC)	Chengara Surendran	CPI
217	Quilon	P. Rajendran	CPI(M)
218	Chirayinkil	Varkala Radhakrishnan	CPI(M)
219	Trivandrum	Pannian Ravindran	CPI

MADHYA PRADESH (29)

220	Morena (SC)	Ashok Chhaviram Argal	BJP
221	Bhind	Dr. Ramlakhan Singh	BJP
222	Gwalior	Yashodhara Raje Scindia	BJP
223	Guna	Jyotiraditya Madhavrao Scindia	INC
224	Sagar (SC)	Virendra Kumar	BJP
225	Khajuraho	Dr. Ramkrishna Kushmariya "Baba Jee"	BJP
226	Damoh	Chandrabhan Bhaiya	BJP
227	Satna	Ganesh Singh	BJP
228	Rewa	Chandramani Tripathi	BJP
229	Sidhi (ST)	Manik Singh	INC
230	Shahdol (ST)	Dalpat Singh Paraste	BJP
231	Balaghat	Gauri Shankar Chaturbhuj Bisen	BJP
232	Mandla (ST)	Faggan Singh Kulaste	BJP
233	Jabalpur	Rakesh Singh	BJP
234	Seoni	Neeta Pateriya	BJP
235	Chhindwara	Kamalnath	INC
236	Betul	Khandelwal Vijay Kumar (Munni Bhaia)	BJP
237	Hoshangabad	Sartaj Singh	BJP
238	Bhopal	Kailash Joshi	BJP
239	Vidisha	Rampal Singh	BJP
240	Rajgarh	Lakshman Singh	BJP
241	Shajapur (SC)	Thawarchand Gehlot	BJP
242	Khandwa	Nand Kumar Singh Chauhan (Nandu Bhaiya)	BJP
243	Khargone	Krishna Murari Moghe	BJP
244	Dhar (ST)	Chhatar Singh Darbar	BJP
245	Indore	Sumitra Mahajan	BJP
246	Ujjain (SC)	Dr. Satyanarayan Jatiya	BJP
247	Jhabua (ST)	Kantilal Bhuria	INC
248	Mandsaur	Dr. Laxminarayan Pandeya	BJP

MAHARASHTRA (48)

249	Rajapur	Suresh Prabhakar Prabhu	SS
250	Ratnagiri	Anant Geete	SS
251	Kolaba	A.R. Antulay	INC
252	Mumbai South	Milind Murli Deora	INC
253	Mumbai South Central	Mohan Rawale	SS
254	Mumbai North Central	Eknath M. Gaikwad	INC
255	Mumbai North East	Kamat Gurudas	INC
256	Mumbai North West	Priya Sunil Dutt	INC
257	Mumbai North	Govinda Arun Ahuja	INC
258	Thane	Paranjape Prakash Vishvanath	SS
259	Dahanu (ST)	Shingada Damodar Barku	INC
260	Nasik	Pingale Devidas Anandrao	NCP
261	Malegaon (ST)	Harischandra Devram Chavan	BJP
262	Dhule (ST)	Chaure Bapu Hari	INC
263	Nandurbar (ST)	Gavit Manikrao Hodlya	INC
264	Erandol	Vasant Rao J. More	NCP
265	Jalgaon	Haribhau Jawale	BJP
266	Buldhana (SC)	Adsul Anandrao Vithoba	SS
267	Akola	Dhotre Sanjay Shamrao	BJP
268	Washim	Ku. Bhavana Pundlikrao Gawali (Patil)	SS
269	Amravati	Anant Gudhe	SS
270	Ramtek	Pakash B. Jadhav	SS
271	Nagpur	Vilas Muttemwar	INC
272	Bhandara	Patle Shishupal Natthu	BJP
273	Chimur	Shivankar Mahadeorao Sukaji	BJP
274	Chandrapur	Ahir Hansraj Gangaram	BJP
275	Wardha	Wagmare Suresh Ganapat	BJP
276	Yavatmal	Rathod Harising Nasaru	BJP
277	Hingoli	Suryakanta Patil	NCP
278	Nanded	D.B. Patil	BJP
279	Parbhani	Tukaram Ganpatrao Renge Patil	SS
280	Jalna	Danve Raosaheb Dadarao Patil	BJP
281	Aurangabad	Chandrakant Khaire	SS
282	Beed	Jaisingrao Gaikwad Patil	NCP
283	Latur	Patil Rupatai Diliprao Nilangekar	BJP
284	Osmanabad (SC)	Narhire Kalpana Ramesh	SS
285	Sholapur	Deshmukh Subhash Sureshchandra	BJP
286	Pandharpur (SC)	Athawale Ramdas Bandu	RPI(A)
287	Ahmednagar	Gadak Tukaram Gangadhar	NCP

288	Kopargaon	E.V. Alias Balasaheb Vikhe Patil	INC
289	Khed	Adhalarao Patil Shivajirao	SS
290	Pune	Kalmadi Suresh	INC
291	Baramati	Pawar Sharadchandra Govindrao	NCP
292	Satara	Laxmanrao Pandurang Jadhav (Patil)	NCP
293	Karad	Patil Shriniwas Dadasaheb	NCP
294	Sangli	Pratik Prakshbapu Pahl	INC
295	Ichalkaranji	Mane Nivedita Sambhajirao	NCP
296	Kolhapur	Mandlik Sadashivrao Dadoba	NCP

MANIPUR (2)

297	Inner Manipur	Dr. Thokchom Meinya	INC
298	Outer Manipur (ST)	Mani Charenamei	IND

MEGHALAYA (2)

Shillong	Paty Ripple Kyndiah	INC
Tura	Purano Agitok Sangma	NCP

MIZORAM (1)

301	Mizoram (ST)	Vanilalzawma	MNF

NAGALAND (1)

Nagaland	W. Wangyuh	NPF

ORISSA (21)

303	Mayurbhanj (ST)	Sudam Marndi	JMM
304	Balasore	Mahamegha Bahan Aira Kharbela Swain	BJP
305	Bhadrak (SC)	Arjun Charan Sethi	BJD
306	Jajpur (SC)	Mohan Jena	BJD
307	Kendrapara	Archana Nayak	BJD
308	Cuttack	Bhartruhari Mahtab	BJD
309	Jagatsinghpur	Brahmananda Panda	BJD
310	Puri	Braja Kishore Tripathy	BJD
311	Bhubaneshwar	Prasanna Kumar Patasani	BJD
312	Aska	Hari Har Swain	BJD
313	Berhampur	Chandra Sekhar Sahu	INC
314	Koraput (ST)	Giridhar Gamang	INC
315	Nowrangpur (ST)	Parsuram Majhi	BJP
316	Kalahandi	Bikram Keshari Deo	BJP
317	Phulbani (SC)	Sugrib Singh	BJD
318	Bolangir	Sangeeta Kumari Singh Deo	BJP
319	Sambalpur	Prasanna Acharya	BJD

320	Deogarh	Dharmendra Pradhan	BJP
321	Dhenkanal	Tathagata Satapathy	BJD
322	Sundargarh (ST)	Jual Oram	BJP
323	Keonjhar (ST)	Ananta Nayak	BJP

PUNJAB (13)

324	Gurdaspur	Vinod Khanna	BJP
325	Amritsar	Navjot Singh Sidhu	BJP
326	Tarn Taran	Dr. Rattan Singh Ajnala	SAD
327	Julundur	Rana Gurjeet Singh	INC
328	Phillaur (SC)	Charnjit Singh Atwal*	SAD
329	Hoshiarpur	Avinash Rai Khanna	BJP
330	Ropar (SC)	Sukhdev Singh Libra	SAD
331	Patiala	Preneet Kaur	INC
332	Ludhiana	Sharanjit Singh Dhillon	SAD
333	Sangrur	Sukhdev Singh Dhindsa	SAD
334	Bhatinda (SC)	Paramjit Kaur Gulshan	SAD
335	Faridkot	Sukhbir Singh Badal	SAD
336	Firozepur	Zora Singh Maan	SAD

RAJASTHAN (25)

337	Ganganagar (SC)	Nihal Chand Meghwal	BJP
338	Bikaner	Dharmendra	BJP
339	Churu	Ramsingh Kaswan	BJP
340	Jhunjhunu	Shish Ram Ola	INC
341	Sikar	Subhash Meharia	BJP
342	Jaipur	Girdhari Lal Bhargava	BJP
343	Dausa	Sachin Pilot	INC
344	Alwar	Dr. Karan Singh Yadav	INC
345	Bharatpur	Vishvendra Singh	BJP
346	Bayana (SC)	Ramswaroop Koli	BJP
347	Sawai Madhopur (ST)	Namo Narain	INC
348	Ajmer	Rasa Singh Rawat	BJP
349	Tonk (SC)	Kailash Meghwal	BJP
350	Kota	Raghuveer Singh Koshal	BJP
351	Jhalawar	Dushyant Singh	BJP
352	Banswara (ST)	Dhan Singh Rawat	BJP
353	Salumber (ST)	Mahaveer Bhagora	BJP
354	Udaipur	Kiran Maheshwari	BJP
355	Chittorgarh	Shrichand Kriplani	BJP

* Deputy Speaker of Lok Sabha

356	Bhilwara	Vijayendrapal Singh	BJP
357	Pali	Pusp Jain	BJP
358	Jalore (SC)	B. Susheela	BJP
359	Barmer	Manvendra Singh	BJP
360	Jodhpur	Jaswant Singh Bishnoi	BJP
361	Nagaur	Bhanwar Singh Dangawas	BJP

SIKKIM (1)

362	Sikkim	Nakul Das Rai	SDF

TAMIL NADU (39)

363	Chennai North	C. Kuppusami	DMK
364	Chennai Central	Dayanidhi Maran	DMK
365	Chennai South	T.R. Baalu	DMK
366	Sriperumbudur (SC)	A. Krishnaswamy	DMK
367	Chengalpattu	A.K. Moorthy	PMK
368	Arakkonam	R. Velu	PMK
369	Vellore	K.M. Kader Mohideen	DMK
370	Tiruppattur	D. Venugopal	DMK
371	Vandavasi	N. Ramachandran Gingee	MDMK
372	Tindivanam	K. Dhanaraju	PMK
373	Cuddalore	K. Venkatapathy	DMK
374	Chidambaram (SC)	E. Ponnuswamy	PMK
375	Dharmapuri	Dr. R. Senthil	PMK
376	Krishnagiri	E.G. Sugavanam	DMK
377	Rasipuram (SC)	K. Rani	INC
378	Salem	K.V. Thangkabalu	INC
379	Tiruchengode	Subbulakshmi Jagadeesan	DMK
380	Nilgiris	R. Prabhu	INC
381	Gobichettipalayam	E.V.K.S. Elangovan	INC
382	Coimbatore	K. Subbarayan	CPI
383	Pollachi (SC)	Dr. C. Krishnan	MDMK
384	Palani	S.K. Kharventhan	INC
385	Dindigul	N.S.V. Chitthan	INC
386	Madurai	P. Mohan	CPI(M)
387	Periyakulam	J.M. Aaron Rashid	INC
388	Karur	K.C. Palanisamy	DMK
389	Tiruchirappalli	L Ganesan	MDMK
390	Perambalpur (SC)	A. Raja	DMK
391	Mayiladuturai	Mani Shankar Aiyar	INC
392	Nagapattinam (SC)	A.K.S. Vijayan	DMK
393	Thanjavur	S.S. Palanimanickam	DMK

394	Pudukkottai	S. Regupathy	DMK
395	Sivaganga	P. Chidambaram	INC
396	Ramanathapuram	M.S.K. Bhavani Rajenthiran	DMK
397	Sivakasi	A. Ravinchandran	MDMK
398	Tirunelveli	R. Dhanuskodi Athithan	INC
399	Tenkasi (SC)	M. Appadurai	CPI
400	Tiruchendur	V. Radhika Selvi	DMK
401	Nagercoil	A.V. Bellarmin	CPI(M)

TRIPURA (2)

402	Tripura West	Khagen Das	CPI(M)
403	Tripura East (ST)	Baju Ban Riyan	CPI(M)

UTTARANCHAL (5)

404	Tehri Garhwal	Vijay Bhauguna	INC
405	Garhwal	Maj.Gen. (Retd.) Bhuwan Chandra Khanduri (AVSM)	BJP
406	Almora	Bachi Singh Rawat	BJP
407	Nainital	K.C. Singh Baba	INC
408	Haridwar (SC)	Rajendra Kumar	SP

UTTAR PRADESH (80)

409	Bijnor (SC)	Munshiram	RLD
410	Amroha	Harish Nagpal	IND
411	Moradabad	Dr. Shafiqurrahman Barq	SP
412	Rampur	Smt. P.Jaya Prada Nahata	SP
413	Sambhal	Pro. Ram Gopal Yadav	SP
414	Budaun	Saleem Iqbal Shervani	SP
415	Aonla	Kunwar Sarvraj Singh	JD(U)
416	Bareilly	Santosh Gangwar	BJP
417	Pilibhit	Smt. Maneka Gandhi	BJP
418	Shahjahanpur	Kunwar Jitin Prasad	INC
419	Kheri	Ravi Prakash Verma	SP
420	Shahabad	Iliyas Azmi	BSP
421	Sitapur	Rajesh Verma	BSP
422	Misrikh (SC)	Ashok Kumar Rawat	BSP
423	Hardoi (SC)	Usha Verma	SP
424	Lucknow	Atal Bihari Vajpayee	BJP
425	Mohanlal Ganj (SC)	Jai Prakash	SP
426	Unnao	Brajesh Pathak	BSP
427	Rae Bareli	Sonia Gandhi	INC
428	Pratapgarh	Akshay Pratap Singh "Gopal Ji"	SP
429	Amethi	Rahul Gandhi	INC

430	Sultanpur	Mohd. Tahir	BSP
431	Akbarpur (SC)	Shankhlal Majhi	SP
432	Faizabad	Mitrasen	BSP
433	Bara Banki (SC)	Kamla Prasad	BSP
434	Kaiserganj	Beni Prasad Verma	SP
435	Bahraich	Rubab Sayeda	SP
436	Balrampur	Brij Bhushan Sharan Singh	BJP
437	Gonda	Kirti Vardhan Singh Alias Raja Bhaiya	SP
438	Basti (SC)	Lal Mani Prasad	BSP
439	Domariaganj	Mohd. Muqueem	BSP
440	Khalilabad	Bhalchandra Yadava	BSP
441	Bansgaon (SC)	Mahaveer Prasad	INC
442	Gorakhpur	Aditya Nath	BJP
443	Maharajganj	Pankaj	BJP
444	Padrauna	Baleshwar Yadav	NLP
445	Deoria	Mohan Singh	SP
446	Salempur	Harikeval Prasad	SP
447	Ballia	Vacant	
448	Ghosi	Chandradeo Prasad Rajbhar	SP
449	Azamgarh	Ramakant Yadav	BSP
450	Lalganj (SC)	Daroga Prasad Saroj	SP
451	Machhlishahr	Umakant Yadav	BSP
452	Jaunpur	Parasnath Yadava	SP
453	Saidpur (SC)	Tufani Saroj	SP
454	Ghazipur	Afajal Ansari	SP
455	Chandauli	Kailash Nath Singh Yadav	BSP
456	Varanasi	Dr. Rajesh Kumar Mishra	INC
457	Robertsganj (SC)	Bhailal	BSP
458	Mirzapur	Ramesh Dube	BJP
459	Phulpur	Atique Ahamad	SP
460	Allahabad	Kunwar Rewati Raman Singh alias Mani Ji	SP
461	Chail (SC)	Shailendra Kumar	SP
462	Fatehpur	Mahendra Prasad Nishad	BSP
463	Banda	Shyama Charan Gupta	SP
464	Hamirpur	Rajnarayan alias Rajju Mahraj	SP
465	Jhansi	Chandrapal Singh Yadav	SP
466	Jalaun (SC)	Bhanu Pratap Singh Verma	BJP
467	Ghatampur (SC)	Radhey Shyam Kori	SP
468	Bilhaur	Anil Shukla Warsi	BSP
469	Kanpur	Prakash Jaiswal	INC
470	Etawah	Raghuraj Singh Shakya	SP
471	Kannauj	Akhilesh Yadav	SP
472	Farrukhabad	Chandra Bhushan Singh (Munnoo Babu)	SP

473	Mainpuri	Dharmendra Yadav	SP
474	Jalesar	Pro.S.P. Singh Baghel	SP
475	Etah	Ku. Devendra Singh Yadav	SP
476	Firozabad (SC)	Ram Ji Lal Suman	SP
477	Agra	Raj Babbar	SP
478	Mathura	Manvendra Singh	INC
479	Hathras (SC)	Kishan Lal Diler	BJP
480	Aligarh	Bijendra Singh	INC
481	Khurja (SC)	Ashok Kumar Pradhan	BJP
482	Bulandshahr	Kalyan Singh	BJP
483	Hapur	Surendra Prakash Goyal	INC
484	Meerut	Mohd. Shahid	BSP
485	Baghpat	Ajit Singh	RLD
486	Muzaffarnagar	Ch. Munawwar Hasan	SP
487	Kairana	Anuradha Choudhary	RLD
488	Saharanpur	Rasheed Masood	SP

WEST BENGAL (42)

489	Cooch Behar (SC)	Hiten Barman	AIFB
490	Alipurduars (ST)	Joachim Baxla	RSP
491	Jalpaiguri	Minati Sen	CPI(M)
492	Darjeeling	Dawa Narbula	INC
493	Raiganj	Priyaranjan Dasmunsi	INC
494	Balurghat (SC)	Ranen Barman	RSP
495	Malda	Abu Hasem Khan Choudhury	INC
496	Jangipur	Pranab Mukherjee	INC
497	Murshidabad	Abdul Mannan Hossain	INC
498	Berhampore	Adhir Ranjan Chowdhury	INC
499	Krishnagar	Jyotirmoyee Sikdar	CPI(M)
500	Nabadwip (SC)	Alakesh Das	CPI(M)
501	Barasat	Subrata Bose	AIFB
502	Basirhat	Ajay Chakraborty	CPI
503	Joynagar (SC)	Sanat Kumar Mandal	RSP
504	Mathurapur (SC)	Basudeb Barman	CPI(M)
505	Diamond Harbour	Samik Lahiri	CPI(M)
506	Jadavpur	Sujan Chakraborty	CPI(M)
507	Barrackpore	Tarit Baran Topdar	CPI(M)
508	Dum Dum	Amitava Nandy	CPI(M)
509	Kolkata North West	Sudhangshu Seal	CPI(M)
510	Kolkata North East	Md. Salim	CPI(M)
511	Kolkata South	Mamata Banerjee	AITC
512	Howrah	Swadesh Chakrabortty	CPI(M)
513	Uluberia	Hannan Mollah	CPI(M)

514	Serampore	Santasri Chatterjee	CPI(M)
515	Hooghly	Rupchand Pal	CPI(M)
516	Arambagh	Anil Basu	CPI(M)
517	Panskura	Gurudas Dasgupta	CPI
518	Tamluk	Seth Lakshman Chandra	CPI(M)
519	Contai	Prasanta Pradhan	CPI(M)
520	Midnapore	Prabodh Panda	CPI
521	Jhargram (ST)	Rupchand Murmu	CPI(M)
522	Purulia	Narahari Mahato	AIFB
523	Bankura	Acharia Basudeb	CPI(M)
524	Vishnupur (SC)	Susmita Bauri	CPI(M)
525	Durgapur (SC)	Sunil Khan	CPI(M)
526	Asansol	Bansagopal Chowdhury	CPI(M)
527	Burdwan	Nikhilananda Sar	CPI(M)
528	Katwa	Abu Ayes Mondal	CPI(M)
529	Bolpur	Somnath Chatterjee*	CPI(M)
530	Birbhum (SC)	Dome Ram Chandra	CPI(M)

ANDAMAN & NICOBAR ISLANDS (1)

531	Andaman & Nicobar Islands	Manoranjan Bhakta	INC

CHANDIGARH (1)

532	Chandigarh	Pawan Kumar Bansal	INC

DADRA & NAGAR HAVELI (1)

533	Dadra & Nagar Haveli (ST)	Mohanbhai Sanjibhai Delkar	BNP

DAMAN & DIU (1)

534	Daman and Diu	Dahyabhai Vallabhbhai Patel	INC

NATIONAL CAPITAL TERRITORY OF DELHI (7)

535	New Delhi	Ajay Maken	INC
536	South Delhi	Vijay Kumar Malhotra	BJP
537	Outer Delhi	Sajjan Kumar	INC
538	East Delhi	Sandeep Dikshit	INC
539	Chandni Chowk	Kapil Sibal	INC
540	Delhi Sadar	Jagdish Tytler	INC
541	Karol Bagh (SC)	Smt. Krishna Tirath	INC

LAKSHADWEEP (1)

* Speaker of Lok Sabha

542	Lakshadweep (ST)	Dr. P. Pookunhikoya	JD(U)
PUDUCHERRY (1)			
543	Puducherry	M. Ramadoss	PMK
544	Nominated	Ingrid Mcleod (Chhattisgarh)	INC[1]
545	Nominated	Francis Fanthome (Delhi)	INC[2]

Abbreviations used for Parties : All India Forward Bloc - AIFB; All India Majlis-e-Ittehadul Muslimeen - AIMEIM; All India Trinamool Congress -AITC; Asom Gana Parishad - AGP; Bahujan Samaj Party - BSP; Bharatiya Janata Party- BJP; Bharatiya Navshakti Party - BNP; Biju Janata Dal - BJD; Communist Party of India - CPI; Communist Party of India (Marxist) - CPI(M); Dravida Munnetra Kazhagam - DMK; Indian National Congress - INC; Jammu & Kashmir National Conference - J&KNC; Janata Dal (Secular) - JD (S); Janata Dal (United) - JD (U); Jharkhand Mukti Morcha - JMM; Kerala Congress - KC; Lok Jan Shakti Party - LJSP; Marumalarchi Dravida Munnetra Kazhagam - MDMK; Mizo National Front - MNF; Muslim League - ML; Nagaland Peoples Front - NPF; Nationalist Congress Party - NCP; Pattali Makkal Katchi - PMK; Jammu and Kashmir Peoples Democratic Party - J&K PDP; Rashtriya JanataDal - RJD; Rashtriya Lok Dal - RLD; Republican Party of India (A) - RPI (A); Revolutionary Socialist Party - RSP; Samajwadi Janata Party (Rashtriya) - SJP (R); Samajwadi Party - SP; Shiromani Akali Dal - SAD; Shiv Sena - SS; Sikkim Democratic Front - SDF; Telangana Rashtra Samithi - TRS; Telugu Desam Party - TDP; Independent-IND.

[1] Joined INC w.e.f. 8 December 2004

[2] Joined INC w.e.f. 9 December 2004